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Fear of Negative and Positive Evaluation across Social Evaluative Situations

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Fear of Negative and Positive Evaluation across Social Evaluative Situations

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Abstract

Fear of negative and fear of positive evaluation are both important in understanding social evaluative anxiety. Fear of negative evaluation has been linked with social anxiety, public speaking anxiety, and test anxiety; whereas fear of positive evaluation has only been linked with social anxiety. This paper reviews the literature on fear of negative and positive evaluation in relation to each of the social evaluative situations and then presents the findings of a study that will attempt to differentiate the three types of social evaluative situations. Fear of negative evaluation was correlated with each of the three social evaluative situations; whereas fear of positive evaluation was correlated with both social anxiety and test anxiety but not public speaking anxiety. Finally, social anxiety did not moderate the relationships of FPE with either test anxiety or public speaking anxiety. These findings provide a better understanding of the types of evaluation fears that individuals with social anxiety, public speaking anxiety, and test anxiety may exhibit, which should be considered when assessing distorted cognitions.

Fear of Negative and Positive Evaluation across Social Evaluative Situations

Anxiety about being in social evaluative situations is common, and people often avoid these types of situations as a result. For example, numerous studies have linked social anxiety and fear of negative evaluation (Carleton, Collimore, McCabe, & Antony, 2011). Less is known about fear of negative evaluation across other types of social evaluative situations, such as public speaking or taking tests. In addition, recent research has found that positive evaluation is likewise associated with social anxiety – a topic that has not been examined in conjunction with public speaking or test anxiety. Thus, the present study examined negative and positive evaluation across three types of different but related social evaluative situations: social interactions, public speaking, and testing situations. This paper begins with a review of relevant literature and then presents the results of our study that examined the relations of both fear of negative and fear of positive evaluation to these social evaluative situations.

Social Evaluation

Social evaluation involves being appraised by others in a social situation or setting. Social interaction, public speaking, and testing all share an aspect of social evaluation (Rapee & Heimberg, 1997). This type of evaluation often leads people to experience anxiety. Indeed, individuals experience anxiety across a number of different situations, with the prospect of social evaluation triggering anxiety responses. In particular, researchers have considered the overlap between social interaction anxiety, public speaking anxiety, and test anxiety because they all share this element of social evaluation (Cox, Clara, Sareen, & Stein, 2008; Knappe et al., 2011; Perugi et al., 2001). In this section, some terms will be briefly defined and then examined in relation to social evaluation.

Social anxiety is fear and avoidance of social interactions as well as performance situations (e.g., eating, drinking) (Aderka, Haker, Marom, & Hermesh, 2013). Because social anxiety is typically assumed to include fear of social interactions as well as performing in front of others, some researchers have posited that it is superordinate with regard to social evaluative situations and that similar concerns (e.g., public speaking) are essentially subtypes of social anxiety (Blöte, Kint, Miers, & Westenberg, 2009; Heimberg, Hope, Dodge, & Becker, 1990; Schlenker & Leary, 1982). This paper uses that basic premise as a starting point, with the intent of examining whether these various social evaluative situations have different predictors – namely fear of negative evaluation and fear of positive evaluation.

Public speaking anxiety is anxiety regarding an expected or actual presentation or speech and can be manifested physiologically (e.g., increased heart rate), cognitively (e.g., negative cognitions), and/or behaviorally (e.g., trembling) (Daly, McCroskey, Ayres, Hopf, & Aryes 1997). It has long been an axiom that public speaking anxiety is a type or specifier of social anxiety (Eng, Heimberg, Coles, Schneier, & Liebowitz, 2000; Rapee & Heimberg, 1997; Stein, Walker, & Forde, 1996). Schlenker and Leary (1982), for example, suggested public speaking anxiety is a type of social anxiety, the hallmark of which "is the threat of unsatisfactory evaluations from audiences" (p. 646). This conceptualization establishes being evaluated negatively as the central concern of those with high levels of public speaking anxiety, thereby tying public speaking anxiety to social anxiety.

Finally, test anxiety has been conceptualized as responses, either physiological or behavioral, concerning possible failure in any testing situation (Sieber, O'Neil Jr., & Tobias, 1977). Knappe (2011) found that in youths with clinically significant levels of social anxiety, 70.3% feared speaking in front of others and 75.2% feared testing situations; isolated fears of

speaking in front of others and of testing situations were 1.4% and 11.2%, respectively. Similar findings by Beesdo-Baum and colleagues (2012) demonstrate that in individuals diagnosed with social anxiety disorder, 57.9% feared public speaking situations and 62.7% feared testing situations; isolated fears of public speaking and of testing situations were 12.2% and 23%, respectively. The high overlap of these fears indicates that individuals who have social anxiety are likely to have other fears concerning social evaluation, suggesting a connection exists between social anxiety, public speaking anxiety, and test anxiety.

In addition, questionnaire measures of these three social evaluative situations have been correlated. Across studies, positive correlations have been found between measures of social anxiety and public speaking anxiety (r = .38 to .76; Deiters, Stevens, Hermann, & Gerlach, 2013; Hindo & Gonzalez-Prendes, 2011; Hook, 2008), and social anxiety and test anxiety (r = .30; Mueller & Thompson, 1984). Using two different scales measuring public speaking anxiety, the Personal Report of Communication Apprehension (PRCA; McCrosky, 1970) and the Personal Report of Public Speaking Anxiety (PRPSA; McCrosky, 1970), McCrosky found both were correlated with test anxiety at .32 and .36, respectively. McCrosky (1970) suggests the correlations between measures of public speaking anxiety and test anxiety may reflect a general anxiety level in an individual across public speaking and testing situations. What McCrosky (1970) referred to as a general anxiety level, though, may actually be fear of negative evaluation, and perhaps fear of negative evaluation is the common link between or underlying factor that unites social anxiety, public speaking anxiety, and test anxiety.

Other studies have documented high comorbidity rates among individuals with test anxiety. Using DSM-III-R (3rd ed., rev., *DSM-III-R*; American Psychiatric Association, 1987) criteria, Beidel and Turner (1988) found that in highly test-anxious elementary school students

between the ages of 8 to 12 years, 60% met criteria for either social phobia, simple phobia, separation anxiety disorder, or overanxious disorder. Similarly, Beidel, Turner, & Tragel (1994) found that 54% of children high in test anxiety also met criteria for social phobia, simple phobia, overanxious disorder, or obsessive-compulsive disorder, with 10% meeting criteria for more than one disorder. Likewise, King, Mietz, Tinney, and Ollendick (1995) found that 61% of 9th and 10th grade students scoring high in test anxiety met criteria for overanxious disorder, separation anxiety disorder, avoidant disorder, social phobia, simple phobia, or major depression, with seven children meeting criteria for more than one disorder.

LeBeau and colleagues (2010) reason that this comorbidity is not surprising given that anxiety problems such as social phobia (social anxiety disorder) and overanxious disorder, as well as test anxiety, share the feature of a fear of negative evaluation by others. Indeed, this shared feature of fear of negative evaluation by others has led many researchers to speculate that test anxiety is a type of social anxiety or is part of a larger general anxiety construct (Beidel, 1988; McDonald, 2001; Sarason, 1975; Sieber et al., 1977). Complicating the issue, public speaking anxiety and test anxiety are not DSM-5 (5th ed.; *DSM-5*; American Psychiatric Association, 2013) diagnoses, making it difficult to document where they belong in terms of classification. The only mention DSM-5 makes of either condition is the allowance that individuals experiencing severe or debilitating public speaking anxiety can receive a diagnosis of social anxiety with the "performance only" specifier, which is new to the DSM-5. This study examined these three types of social evaluative situations, focusing specifically on negative and positive evaluation fears.

Fear of Negative Evaluation. Fear of negative evaluation (FNE) is apprehension about and distress over negative appraisals by others. One who is high in FNE often attempts to avoid

evaluative situations and frequently has the expectation that her/his performance will be judged negatively even in situations where the performance was good (Rapee & Lim, 1992; Stopa & Clark, 1993). FNE may be seen in any social evaluative situation, including testing, being on a date, talking to one's superiors, being interviewed for a job, or giving a speech (Watson & Friend, 1969). Watson and Friend (1969) found that individuals high in FNE worked harder than individuals low in FNE on boring tasks when they were told that their work would be evaluated by others. Thus, individuals high in FNE seem to undertake behaviors intended to avoid negative evaluations by others. Furthermore, individuals high in FNE interpret feedback concerning a social interaction as more negatively than do individuals low in FNE (Smith & Sarason, 1975), lending credence to the notion of an expectation of negative evaluation by others.

Conceptual models of social anxiety have viewed FNE as a central component of social anxiety (Clark & Wells, 1995; Rapee & Heimberg, 1997). Rapee and Heimberg's (1997) Cognitive-Behavioral Model of Anxiety in Social Phobia views FNE as the primary fear of an individual when she/he is in a social evaluative situation. Rapee and Heimberg (1997) assert that these fears exist for persons with social anxiety in any situation where an audience exists; the term "audience" denoting not only a group of intentional observers, but also anyone who may be in a position to evaluate the individual's appearance, behavior, or mannerisms (e.g., an individual seated in a cafeteria would be an audience to someone carrying a lunch tray to her/his seat). Therefore, an interaction or intentional observation is not needed for anxiety to be generated in a social evaluative situation. All that needs to be present for an individual to experience anxiety is the potential for interaction or observation with or by others, which creates a potential for negative evaluation.

FNE was first examined as a correlate of social anxiety by Watson and Friend (1969), and since has been correlated with other disorders, including depression (Wang, Hsu, Chiu, & Liang, 2012) and eating disorders (Levinson et al., 2013). Nevertheless, there is still a paucity of studies examining whether FNE is related to other, related social evaluative situations. Thus, this study examined FNE across these types of situations.

Fear of Positive Evaluation. More recently, researchers have considered the possibility that social anxiety may feature a fear of positive evaluation as well. Unlike FNE, which has been correlated with a variety of other disorders, fear of positive evaluation may be exclusive to social anxiety. Fear of positive evaluation (FPE) is the expectation that others may view one positively, which is accompanied by feelings of apprehension and distress (Weeks, Heimberg, & Rodebaugh, 2008a). The person feels a sense of dread about being evaluated favorably and publicly because it can lead to a direct social comparison of the self to others, causing the individual to feel "in the spotlight" (Weeks, Jakatdar, & Heimberg, 2010, p. 69). Wallace and Alden (1995, 1997) found that individuals who were socially anxious and received positive social feedback during a social interaction believed other's expectations for them in future interactions would be higher. They speculated that the individual's fear of being appraised positively was simply a fear of eventual negative evaluation. That is, individuals feared positive appraisal because they worried they would not be able to meet these higher expectations in the future, which may result ultimately in being evaluated negatively.

The term 'fear of positive evaluation' though, was not used until Weeks and colleagues (2008a) found that negative and positive evaluative fears contributed unique variance to social interaction anxiety. They contend that this finding suggests Wallace and Alden (1995, 1997) were incorrect in their assumption; one would not expect FPE to contribute unique variance to

social interaction anxiety if it was simply fear of eventual negative appraisal. It is also important to note that although FPE has been correlated with FNE (r = .36 to .74; Fergus et al., 2009; Weeks et al., 2008a; Weeks & Howell, 2012), confirmatory factor analysis on the items of both the Fear of Positive Evaluation Scale (FPES) and the Brief Fear of Negative Evaluation Scale-II (BFNE-II) have demonstrated that FPE and FNE are distinct factors.

Gilbert's (2001) psycho-evolutionary model of social anxiety informed Weeks and colleagues (2008a) proposal of the FPE construct. Gilbert's model proposes that the purpose of social anxiety is to avoid unnecessarily challenging the dominant member of a social group, while also remaining safe and within the group's protection. Building on Gilbert's model, Weeks and colleagues (2008a) proposed that individuals scoring high in FPE who are appraised positively worry about reprisal by those whom they perceive to outrank them socially. These individuals experience fear about performing well because it will draw attention to them and elicit self and other comparison with others. In turn, they fear that this positive evaluation may lead to higher expectations in the future, which they worry they will not be able to meet, resulting in possible future negative evaluation. FPE is a relatively new construct and has been examined primarily in relation to social anxiety. This paper will now review the available research on fear of negative and fear of positive evaluation across social interaction, public speaking, and test anxiety.

Social anxiety

Prevalence rates (12-month) for social anxiety disorder are approximately 7% (5th ed.; *DSM-5*; American Psychiatric Association, 2013) making it one of the most common of all mental disorders (Kessler, 2003). Social anxiety has been associated with impairment in a variety

of areas, including increased truancy and likelihood of repeating a grade in children (Davidson, Hughes, George, & Blazer, 1993), decreased productivity at work (Greenberg et al., 1999), increased rates of suicide attempts (Davidson et al., 1993), and more obviously, having fewer friendships and other social contacts (Wittchen & Beloch, 1996). Many models of social anxiety have been proposed over the years (Clark & Wells, 1995; Hofmann, 2007; Rapee & Heimberg, 1997; Schlenker & Leary, 1982). Clark and Well's (1995) cognitive model of social phobia and Rapee and Heimberg's (1997) cognitive-behavioral model of anxiety in social phobia are two of the most well-known models. Clark and Well's (1995) model assumes that at the core of social anxiety is a strong desire to convey a favorable impression of oneself to others and a lack of belief in one's ability to do so. Individuals with high levels of social anxiety think that when they enter social situations they will likely exhibit inept or unacceptable behaviors and that those behaviors will have disastrous consequences regarding loss of worth, status, and rejection (Clark & Wells, 1995). When in an anxiety-provoking situation, individuals form a mental representation of her/his appearance and behavior from the audience's viewpoint and then focus their attention inward onto this internal representation (Rapee & Heimberg, 1997). Both Clark and Wells (1995) and Rapee and Heimberg (1997) posit that when an individual enters a social situation, an "anxiety program," consisting of a combination of cognitive, somatic, affective, and behavioral changes, is automatically activated. The activation of this program leads to a vicious cycle that maintains the socially anxious feelings.

There is ample research attempting to differentiate social anxiety from public speaking and test anxiety. Two ways in which this has been done is by examining the types or number of feared situations. Concerning types of feared situations, much research has documented the difference between interaction anxiety and performance anxiety. Interaction anxiety is distress

when meeting and talking with other people. Individuals high in interaction anxiety fear being perceived as inarticulate, boring, or stupid. They also fear not knowing what to say or how to respond in a social interaction, or being ignored (Mattick & Clarke, 1998). Performance anxiety is fear of the prospect of being watched or observed or actually being watched or observed by other people while engaging in routine behaviors, including eating, drinking, speaking in public, taking a test, and so forth (Mattick & Clarke, 1998). The Social Interaction Anxiety Scale (SIAS; Mattick & Clarke, 1998) and the Social Phobia Scale (SPS; Mattick & Clarke, 1998), two companion measures for assessing social anxiety, assess both interaction anxiety and performance anxiety. Mattick and Clarke (1998) found three factors loaded onto the SPS, all relating to being observed and/or scrutinized in public, and one factor loaded onto the SIAS - fear of social interaction. Consistent with the definition by Mattick and Clarke (1998), individuals who fear public speaking situations or testing situations would have a performance fear and would not necessarily fear social interaction situations. Several studies using factor analysis have examined fears of those with social anxiety and found that interaction fears and performance fears load onto separate factors (Eng et al., 2000; Perugi et al., 2001; Safren et al., 1999) and are therefore qualitatively distinct.

Concerning the number of feared situations, individuals high in social anxiety are likely to fear a greater number of situations than individuals low in social anxiety. Individuals with clinical levels of social anxiety may have social interaction fears, performance fears, or both. Previously, the DSM-IV-TR (4th ed., text rev.; *DSM-IV*-TR; American Psychiatric Association, 2000) considered individuals with the generalized subtype, defined as fearing most social situations, as likely experiencing more impairment than simply having one or two specific fears, referred to as non-generalized social anxiety. Indeed, research has supported this assertion

(Kessler, Stein, & Berglund, 1998; Mannuzza et al., 1995; Stein, Torgrud, & Walker, 2000). Also, many studies have found that persons with generalized social anxiety are more likely to have comorbid depression or substance abuse (Manuzza et al., 1995; Holt, Heimberg, & Hope, 1992; Turner et al., 1992). Although much research based on the DSM-IV-TR (4th ed., text rev.; *DSM-IV*-TR; American Psychiatric Association, 2000) criteria for social anxiety disorder has shown that individuals with generalized social anxiety experience more distress and impairment than those with non-generalized, some research is contradicting.

Mannuzza and colleagues (1995) found that individuals with generalized social anxiety, defined as fearing five or more social situations, were more likely to have comorbid depression and alcoholism during their lives. They were also more likely to be single than those with non-generalized social anxiety, although another study found no difference in marital status in individuals with generalized social anxiety (Schneier, Spitzer, Gibbon, Fyer, & Liebowitz, 1991). Stein, Tancer, Gelernter, Vittone, and Uhde (1990) found no significant difference between rates of depression in individuals with either generalized or non-generalized social anxiety, further contradicting the findings of Manuzza and colleagues (1995). Contradictory findings regarding the generalized subtype of social anxiety may be due to the vagueness of the definition of the generalized subtype (i.e., *most* social situations) (Manuzza et al., 1995). That is, researchers often operationally define generalized social anxiety differently, making comparisons across studies difficult (Hofmann, Heinrichs, & Moscovitch, 2004).

Social Anxiety and Fear of Negative Evaluation. Individuals who are socially anxious may hold the negative assumption that people are inherently critical and likely to evaluate them negatively (Clark & Wells, 1995; Rapee & Heimberg, 1997). Other researchers have contended that FNE is central to understanding social anxiety (Butler, 1985; Turner, Beidel, & Townsley,

1992). Consistent with these assumptions, models of social anxiety posit that fear of being evaluated negatively is a central concern of those with high levels of social anxiety (Clark & Wells, 1995; Rapee & Heimberg, 1997; Schlenker & Leary, 1982). If this assumption is true, then it follows that these individuals are likely to underestimate their performance on certain social evaluative tasks. Several studies (Rapee & Lim, 1992; Stopa & Clark, 1993; Voncken & Bogels, 2008) have shown this biased perception in these individual's assessment of their social performance.

Another assumption of both models is that individuals high in social anxiety, given their hypervigilence concerning possible negative evaluation, are more likely to interpret social situations as more threatening than do individuals low in social anxiety. This assumption has received some research support (Amin, Foa, & Coles, 1998; Stopa & Clark, 2000). Stopa and Clark (2000) found that individuals scoring high in social anxiety were more likely to choose negative interpretations of ambiguous social situations (e.g., "You have visitors round for a meal and they leave sooner than expected") than were those scoring low in social anxiety. There were no differences between groups in interpretation of ambiguous nonsocial events (e.g., "A letter marked urgent arrives at your home"). These findings lend support to the assumption that individuals with social anxiety interpret social situations in particular as more threatening, but show no difference in interpretation of nonsocial events when compared to individuals with low levels of social anxiety.

When individuals high in social anxiety enter a situation in which there is a possibility of negative evaluation by others, there is a shift in attentional focus. For example, in a social interaction, instead of focusing on the other person or persons, individuals turn attention inward and perform detailed monitoring and observation of themselves. Two things happen when people

turn attention inwards. First, when attentional resources are allocated to self-monitoring, fewer resources are available to focus on the interaction. Second, negative self-evaluative thoughts often accompany this monitoring (Clark & Wells, 1995). Consistent with this assertion, numerous studies have examined cognitions in individuals with social anxiety and found that individuals with high levels of social anxiety report a significantly larger number of negative cognitions in social situations (Beidel, Turner, & Dancu, 1985; Hackmann, Clark, & McManus, 2000; Hackmann, Surawy, & Clark, 1998; Turner, Beidel, & Larkin, 1986).

Numerous studies have found that individuals with high levels of social anxiety score significantly higher than individuals with low levels of social anxiety on the Fear of Negative Evaluation Scale (Watson & Friend, 1969) (Beidel et al., 1985; Mansell & Clark, 1999; Rapee & Lim, 1992; Stopa & Clark, 1993; Stopa & Clark, 2000; Wenzel, 2004). These findings support the assertion that FNE is a component of social anxiety. Finally, there is a large body of literature supporting FNE as a correlate of social anxiety in both adult clinical (Carleton et al., 2011) and adult community studies (Leary, 1983; Levinson & Rodebaugh, 2012; Makkar & Grisham, 2011; Weeks et al., 2008a; Wong & Moulds, 2012). Child and adolescent community studies (Zhou, Xu, Inglés, Hidalgo, & La Greca, 2008; Zupančič, Inglés, Bajec, & Levpušček, 2011) have also supported FNE as a correlate of social anxiety.

Social Anxiety and Fear of Positive Evaluation. FPE is a correlate of social anxiety, as demonstrated in adult community (Levinson & Rodebaugh, 2012; Niquee & Samadi, 2013; Rodebaugh, Weeks, Gordon, Langer, & Heimberg, 2012; Weeks et al., 2008a; Weeks, Heimberg, Rodebaugh, & Norton, 2008b; Weeks et al., 2010; Weeks, Norton, & Heimberg, 2009) and clinical (Fergus et al., 2009; Weeks, Heimberg, Rodebaugh, Goldin, & Gross, 2012) studies. FPE has also been correlated to social anxiety in a community sample of adolescents

(Lipton, Augenstein, Weeks, & De Los Reyes, 2013). Weeks and colleagues (2008a) found that FPE accounted for significant variance in social interaction anxiety above and beyond the variance accounted for by FNE. This finding suggests that FPE is indeed a unique construct different from FNE. In a follow up study, Weeks and colleagues (2008b) replicated their findings from the first study, finding that FPE accounted for significant variance in social interaction anxiety above and beyond the variance accounted for by FNE.

Fergus and colleagues (2009) examined FPE in a clinical sample ($N = 133$) of adolescents and adults and found that individuals with social anxiety disorder ($n = 51$) scored significantly higher on the fear of positive evaluation scale than individuals with a different anxiety disorder (e.g., generalized anxiety disorder, panic disorder, obsessive-compulsive disorder). Thus, FPE may be exclusive to social anxiety, although these authors did not include public speaking anxiety or test anxiety in their study. Given their overlap with social anxiety, the possible link between FPE and public speaking and test anxiety should be investigated.

Weeks and colleagues (2012) found that FPE related significantly more strongly to social anxiety symptoms than to depressive symptoms in a clinical sample. When excluding individuals with comorbid generalized anxiety disorder to account for elevated base rates of worry, FPE related more strongly to social anxiety than to worry. This study also identified a cut-off score on the fear of positive evaluation scale that successfully differentiated between individuals with social anxiety disorder and individuals in the control group.

Heimberg, Brozovich, and Rapee's (2010) Cognitive Behavioral Model of Social Anxiety Disorder, an update to Rapee and Heimberg's (1997) model incorporates FPE into their conceptualization of social anxiety. Their original model posited that individuals with social

anxiety feared negative evaluation from others and were vigilant for external indicators of negative evaluation. The updated model states that individuals with social anxiety fear evaluation in general, both positive and negative, and they are vigilant for external indicators of either. Similarly, Weeks and Howell (2012) proposed a model of social anxiety which expands on previous models by stating that fear of evaluation in general, both positive and negative, is important in social anxiety.

Public Speaking Anxiety

Public speaking anxiety can be manifested physiologically (e.g., increased heart rate), cognitively (e.g., negative cognitions), and/or behaviorally (e.g., trembling) (Daly, McCroskey, Ayres, Hopf, & Aryes 1997) and is one of the most common fears in the general population (Bodie, 2010). Some researchers estimate that as many as 85% of the general population have some level of anxiety about public speaking (Burnley, Cross, & Spanos, 1992). In a large community sample of adults ($N = 3021$), 24.8% feared public speaking (Knappe et al., 2011). In the same study, 70.3% of individuals with clinical levels of social anxiety also feared public speaking.

Although many models of public speaking anxiety have been proposed (e.g., Behnke & Beatty, 1981; Finn, Sawyer, & Behnke, 2009), few have received substantial research attention. Therefore, theoretically, examining public speaking anxiety through the lens of Clark and Wells (1995) Cognitive Model of Social Phobia and Rapee and Heimberg's (1997) Cognitive-Behavioral Model of Anxiety in Social Phobia seem most appropriate, given the close relationship between social anxiety and public speaking anxiety. In fact, Rapee and Heimberg (1997) state that the generalized and non-generalized social anxiety subtypes share more

similarities than differences and, therefore, they assert that their model can be applied to public speaking anxiety as well. Therefore, the processes that occur in someone high in public speaking anxiety when entering a public speaking situation are the same: they fear they will exhibit inept or unacceptable behaviors and that those behaviors will have disastrous consequences regarding loss of worth, status, and rejection (Clark & Wells, 1995).

Public speaking anxiety has been differentiated from social anxiety through a number of studies using either factor or cluster analyses, including three adult clinical studies that have examined the factor structure of items on the Liebowitz Social Anxiety Scale (LSAS; Liebowitz, 1987). Eng and colleagues (2000) and Safren and colleagues (1999) found the same five items loaded onto a public speaking anxiety factor (e.g., "acting, performing, or giving a talk in front of an audience", "giving a report to a group"), separate from other factors such as social interaction, observation by others, eating and drinking in front of others, and anxiety regarding strangers. Perugi and colleagues found four of the same items loaded onto a public speaking anxiety factor; the only difference in their study was that the item "participating in small groups" loaded on to an interpersonal anxiety factor instead of a public speaking anxiety factor. Public speaking anxiety has emerged as a distinct factor in community studies as well.

Community studies examining social fears in the general population have also revealed public speaking anxiety emerging as a distinct factor, separate from other factors such as social interaction or observation by others (Cox et al., 2008; Furmark, Tillfors, Stattin, Ekselius, & Fredrikson, 2000; Stein & Deutsch, 2003; Vriends, Becker, Meyer, Michael, & Margraf, 2007). These results indicate that although public speaking anxiety has been thought of as a subtype of social anxiety, it is qualitatively distinct. Indeed, Blöte and colleagues (2009) reviewed the literature on subtypes of social anxiety and the relationship between public speaking anxiety and

social anxiety in particular. They concluded there was ample evidence to support a model identifying public speaking anxiety as a specific subtype of social anxiety. Their findings concerning the differentiation of other potential subtypes of social anxiety were less conclusive: "there are still many uncertainties regarding the psychological processes that are involved in the differences between subtypes" (p. 312). FNE and FPE were not used in this study as a means of attempting to differentiate between various subtypes of social anxiety, and could be helpful in addressing this issue.

Public Speaking Anxiety and Negative Evaluation. Given that public speaking anxiety is considered a type of social anxiety, rather than a distinct diagnostic entity, it has not enjoyed the research attention that social anxiety has in relation to FNE. From a theoretical standpoint, Rapee and Heimberg (1997) assert that given the similarities between the generalized and non-generalized subtypes of social anxiety, their model can be applied to public speaking anxiety. That is, the same processes would be expected to occur in individuals when they become anxious in a public speaking situation as in a social interaction situation (e.g., having a strong desire to convey a favorable impression of oneself to others, an expectation for negative evaluation by others, and so forth). Therefore, one would expect FNE to be present in individuals with high levels of public speaking anxiety. Indeed, a number of studies have correlated public speaking anxiety with FNE, ranging from $r = .41$ to 64 in adults (Deffenbacher & Payne, 1978; Heeren, Ceschi, Valentiner, & Dethier, 2013; Horvath et al., 2004; McIntyre & Thivierge, 1995) and adolescents (Zupančič et al., 2011).

Public Speaking Anxiety and Positive Evaluation. Given the nascent nature of research on fear of positive evaluation, to our knowledge no studies to date have examined the putative link between fear of positive evaluation and public speaking anxiety specifically. As discussed

earlier in this paper, fear of positive evaluation has been linked with social interaction anxiety in a number of studies. Given that public speaking anxiety is considered a type of social anxiety, and can exist as a sole fear or as a concomitant fear of those who also fear social interactions, one would expect fear of positive evaluation to be positively correlated with public speaking anxiety in individuals with social interaction fears. In individuals without social interaction fears, however, fear of positive evaluation may not be correlated with public speaking anxiety. Thus, social interaction anxiety may be key in predicting the relationship between public speaking anxiety and fear of positive evaluation.

As an illustration, if an individual with high levels public speaking anxiety who also has high levels of social interaction anxiety is giving a speech and is praised at the end of the speech (e.g. "that was a great speech," "you are a very talented speaker"), then these positive appraisals may lead to increased expectations in the future, which may then result in worry that she/he will not be able to meet these expectations. Conversely, if an individual with high levels of public speaking anxiety and low levels of social interaction anxiety receives similar positive praise following a speech, then she/he likely will not have high levels of fear of positive evaluation. In fact, instead of experiencing greater anxiety following positive appraisal, as someone with high levels of fear of positive evaluation may experience, she/he may be less likely to discredit the validity of the compliment and therefore become more confident in her/his public speaking ability. In addition to examining social anxiety, this study examined and evaluated the link between public speaking anxiety and fear of positive evaluation.

Test Anxiety

As many as 40% of school-aged students experience elevated levels of test anxiety (Turner, Beidel, Hughes, & Turner, 1993). Two different categories of test anxiety models have

dominated the literature over the past few decades. Interference models (Meichenbaum & Butler, 1980; Sarason, 1984; Wine, 1971) posit that differences in performance are due to differences in the attentional focus of examinees; individuals who are high in test anxiety obtain lower test scores because negative cognitions experienced during the test interfere with test performance. For example, if an individual with high levels of test anxiety is in a testing situation, then she/he is likely to become self-focused and experience a greater number of negative self-evaluative thoughts such as "I'm going to fail." These thoughts interfere with performance, as they distract the individual from the test.

In contrast, skills-deficit models (Culler & Holahan, 1980; Kirkland & Hollandsworth, 1980; Naveh-Benjamin, McKeachie, Lin, & Holinger, 1981) posit that individuals have ineffective study habits, and encode material inadequately. These models assume that poor performance is not due to interference from negative cognitions, but rather is due to inadequate study habits. In fact, Kirkland and Hollandsworth (1980) suggest that the term test anxiety is not accurate and that poor test performance should be re-conceptualized as inadequate test taking. More recent models centered on anxiety in evaluative situations, such as Rapee and Heimberg's (1997) cognitive-behavioral model of anxiety in social phobia, may be the best way to view what happens to an individual with test anxiety, as their model "can really be used to illustrate what occurs to any individual when he/she becomes anxious in a social situation" (p.742).

Although some have considered test anxiety as either a type of social anxiety or have included it under a broader anxiety construct along with social anxiety (Sarason, 1975; McDonald, 2001), others have attempted to differentiate test anxiety from social anxiety or other evaluative situations. Perugi and colleagues (2001) performed factor analysis on the items of the Liebowitz Social Anxiety Scale (Liebowitz, 1987) in a clinical sample and found the item

"taking a test" did not load onto any of the five factors that emerged. Safren and colleagues (1999) also performed factor analysis on the items of the Liebowitz Social Anxiety Scale in a clinical sample, but found that the item "taking a test" loaded onto the observational fear factor, which was defined as anxiety of doing something while being observed. These results suggest that test anxiety may not be as closely related to social anxiety as some researchers have speculated.

Cox and colleagues (2008) performed exploratory factor analysis of feared situations of individuals with a diagnosis of social anxiety disorder and found that "taking an exam," loaded onto an observational factor at .78, but did not load onto either a public speaking or social interaction factor. Although the results of these three studies are contradictory, they suggest the same idea: test anxiety seems to be qualitatively distinct from either social interaction anxiety or public speaking anxiety. Given this qualitative distinction, it may be expected that other constructs related to social, public speaking, and test anxiety may vary across the three. Namely, fear of negative and positive evaluation.

Test Anxiety and Negative Evaluation. Much of the research on test anxiety has been conducted using an educational framework; therefore, FNE, which stems from the clinical psychology literature, has not been considered much. However, test anxiety has been correlated positively with fear of negative evaluation, as measured by the Fear of Negative Evaluation Scale, in children and adolescents (Chen, 2002) and adults (Brown & Nelson, 1983; Flett, Blankstein, & Boase, 1987; Goldfried, Linehan, & Smith, 1978; Hopko, 2003).

Other studies have examined negative thought content more generally, and this literature provides further evidence that fear of negative evaluation is associated with test anxiety. Numerous studies have documented a positive correlation between levels of test anxiety and

negative cognitions (Beidel & Turner, 1988; Galassi, Frierson Jr., & Sharer, 1981; King, Mietz, Tinney, & Ollendick, 1995; Prins, Groot, & Hanewald, 1994; Zatz & Chassin, 1983; Zatz & Chassin, 1985). Examples of negative cognitions centering on fear of negative evaluation can be seen in studies by Galassi and colleagues (1981) and Zatz and Chassin (1983). Galassi and colleagues examined the behavior of high, moderate, and low test-anxious students in a testing situation. They found that moderately test anxious students had significantly more negative cognitions than low test anxious students, and high test anxious students had significantly more negative cognitions than moderately test anxious students. Among these negative cognitions was "think how awful it will be if I fail or do poorly," which was experienced in 45% of respondents high in test anxiety and 43% of respondents with moderate levels of test anxiety. Similarly, Zatz and Chassin (1983) found that high test anxious students had significantly more negative thoughts than moderate or low test anxious students. Negative cognitions reported often by high test anxious students in their study include those with an evaluative component, such as "the others probably think I'm dumb" and "everyone usually does better than me." The content of these thoughts seem to reflect not only a fear of the consequences of scoring poorly, but also an expectation of performing poorly on a test. Those consequences would likely involve being negatively evaluated by others. Furthermore, the expectation of performing poorly and being negatively evaluated is consistent with Rapee and Heimberg's (1997) Cognitive Model of Anxiety in Social Phobia.

Many scales assessing test anxiety contain items that seem to indicate a fear of negative evaluation. Researchers have reported a five-factor solution for the Fear Survey Schedule for Children-Revised (Ollendick, 1983). The items "taking a test," "failing a test," and "being criticized by others" loaded onto the fear of failure and criticism factor (Ollendick, 1983;

Ollendick, Neville, & Frary, 1989). A relatively new scale for assessing test anxiety, the Test Anxiety Inventory for Children and Adolescents (Lowe et al., 2008), contains a social humiliation factor with items such as "I am worried that people will make fun of me if I fail a test" and "I fear that my teacher will think I am stupid if I fail a test." Both of these scales contain items that are similar in nature to FNE. This study added to the literature by examining a link between test anxiety and FNE.

Test Anxiety and Positive Evaluation. To date, no studies to our knowledge have considered the relationship between test anxiety and FPE. However, FPE would not be expected to be correlated with test anxiety. As discussed earlier in this paper, some researchers have considered test anxiety a type of social anxiety, as fear of being evaluated is central to both (Beidel, 1988; McDonald, 2001; Sarason, 1975; Sieber et al., 1977). Given the lack of literature examining the link between FPE and test anxiety, we are not sure what to expect. However, since test anxiety has been considered a type of social anxiety, they may have the same correlates. For example, given that FPE has been correlated with social interaction anxiety in a number of studies, one may expect FPE to be correlated with test anxiety if the individual has concomitant social interaction fears. That is, FPE would not be a problem for an individual high in test anxiety but low in social interaction anxiety. Thus, similar to our prediction concerning the relationship between public speaking anxiety and FPE, social interaction anxiety may be key in predicting the relationship between FPE and test anxiety.

As an illustration, if an individual with high levels of test anxiety also has high levels of social interaction anxiety and receives a graded exam and the teacher praises their score (e.g., "you received the highest score in the class," or "you got every question correct"), then these positive appraisals may lead to increased expectations in the future, which may then result in

worry that she/he will not be able to meet these expectations. Conversely, if an individual with high levels of test anxiety and low levels of social interaction anxiety receives similar positive praise following receipt of her/his score, then she/he likely will not fear being positively evaluated. In fact, instead of experiencing greater anxiety following positive appraisal, as someone with high levels of FPE may experience, this individual may be less likely to discredit the validity of the compliment and therefore become more confident in her/his test-taking ability. In addition to examining social anxiety, this study examined and evaluated the link between test anxiety and fear of positive evaluation.

Current Study and Hypotheses

The primary goal of this study was to examine fear of negative and positive evaluation across social interaction, public speaking, and testing situations. The research literature examining FNE in relation to social anxiety is robust. The literature examining FNE in relation to public speaking and test anxiety is less prevalent, but studies have supported FNE as a correlate of both. FPE is a burgeoning research area in social anxiety, and early studies have supported fear of positive evaluation as a correlate of social anxiety. Despite the obvious links of public speaking and test anxiety to social interaction anxiety, the literature has not yet fully examined whether FNE or FPE are related to public speaking and test anxiety.

The relationship between FPE and public speaking anxiety was examined with social anxiety acting as a possible moderating variable. Likewise, the relationship between FPE and test anxiety was examined with social anxiety acting as a moderating variable. It was predicted that social anxiety will moderate the relationship between public speaking anxiety and FPE as well as test anxiety and FPE based on its documented relationship with FPE. This study filled the gap in

the literature concerning FPE and its relationship to both public speaking anxiety and test anxiety, as well as added to the literature concerning the relationship between FNE and the various social evaluative situations.

Hypothesis 1 examined FNE in relation to each of the social evaluative situations. FNE was predicted to be correlated positively with social interaction anxiety, public speaking anxiety, and test anxiety, as is consistent with prior literature (Carleton et al., 2011; Hopko, 2003; Horvath et al., 2004).

Hypothesis 2 examined FPE in relation to each of the social evaluative situations. Hypothesis 2a predicted a positive correlation between FPE and social anxiety, as is consistent with prior research (Lipton et al., 2013; Weeks et al., 2008a; Weeks et al., 2008b). Hypothesis 2b predicted that FPE will not be correlated significantly with either public speaking or test anxiety. To our knowledge, hypothesis 2b has not been examined in previous studies, although based on the FPE literature, it is reasonable to think FPE may be specific to social anxiety and social interaction anxiety in particular.

Hypothesis 3 examined social anxiety as a moderator in the relationship between FPE and both public speaking and test anxiety. Hypothesis 3a predicted a positive correlation between FPE and public speaking anxiety as moderated by social anxiety. Hypothesis 3b predicted a positive correlation between FPE and test anxiety as moderated by social anxiety.

Method

Participants

Participants were students enrolled in an introductory psychology course and recruited through Eastern Illinois University's SONA research pool. Participants received course credit for

their participation. An a priori power analysis indicated that approximately 91 participants would be needed to find a moderate (r = .30) effect.

The initial sample consisted of 172 participants. Thirty-four participants were deleted because they took too little time to complete the study (i.e., less than fifteen minutes); 14 participants were deleted because of too much missing data (over 90% of all items not completed); 1 participant was deleted for responding "1" for all questions; and 1 participant was deleted due to age (26 years) for a more homogenous sample of 18 to 22 years (see Table 1). After deletion of these participants, the final sample consisted of 122 participants. Characteristics of the participants can be found in table 1. The sample was 71% female (n = 87) and 29% male (n = 35). Participants identified as follows: 62.3% White (n = 76), 25.4% Black or African American, *(*n = 31), 4.1% Hispanic or Latino/a (n = 5), 0.8% Asian or Pacific Islander (n = 1), 0.8% American Indian, Alaskan Native, or Native Hawaiian (n = 1), 2.5% Biracial or Multiracial (n = 3), and 2.5% other (n = 3). One individual identified as both White and Hispanic and another individual identified as both White and "other" and were not included above.

Procedure

Participants completed a series of questionnaires online. The questionnaires were counter-balanced to prevent order effects. Participants received course credit for their participation.

Measures

Social Anxiety. Social anxiety was assessed using the Social Interaction Anxiety Scale (SIAS; Mattick & Clarke, 1998). The SIAS assesses social interaction anxiety, which Mattick and Clarke (1998) conceptualize as distress when meeting and talking with other people. The SIAS is a self-report measure consisting of 20-items scored on a 5-point Likert scale (ranging

from 0 = "not at all characteristic or true of me" to 4 = "extremely characteristic or true of me"). A sample item from the scale is, "I worry about expressing myself in case I appear awkward." Scores for each individual item are summed, with higher scores indicating higher levels of social interaction anxiety. The SIAS has shown both high levels of internal consistency (α's ranging from .85-.94; Heimberg, Mueller, Holt, Hope, & Liebowitz, 1992; Mattick & Clarke, 1998; Weeks et al., 2008b; Zubeidat, Salinas, Sierra, Fernandez-Parra, 2007) and test-retest reliabilities (*r*'s ranging from .66-.93; Heimberg et al., 1992; Mattick & Clarke, 1998). Furthermore, the SIAS has shown good convergent validity as evidenced by its correlations with scales examining similar constructs, such as the Fear of Negative Evaluation Scale (FNES; Watson & Friend, 1969) (*r* = .66; Mattick & Clarke, 1998) and the social phobia subscale of the Fear Questionnaire (Marks & Mathews, 1979) (*r* = .66; Mattick & Clarke, 1998).

Public Speaking Anxiety

Public speaking anxiety was assessed using the Personal Report of Public Speaking Anxiety (PRPSA; McCrosky, 1970), a 34-item self-report measure. The items are rated on a 5-point Likert-scale (ranging from 1 = "Strongly Disagree" to 5 = "Strongly Agree", with higher scores indicating higher levels of public speaking anxiety. An item on the scale is, "when I make a mistake while giving a speech, I find it hard to concentrate on the parts that follow." The PRPSA has shown good internal consistency (α = .94; McCrosky, 1970) and good test-retest reliability (*r* = .84; McCrosky, 1970). The PRPSA has shown good convergent validity by correlating (*r* = .41, McCrosky, 1970) with another measure of public speaking anxiety, the Personal Report of Communication Apprehension for College Students (PRCA-College; McCrosky, 1970).

Test Anxiety

Test anxiety was assessed using the Cognitive Test Anxiety Scale (CTAS; Cassady & Johnson, 2002), a 27-item self-report measure. The items are rated on a 4-point Likert-scale (ranging from A = "Not at all typical of me" to D = "Very typical of me," with higher scores indicating higher levels of test anxiety. A sample item on the scale is, "during tests, I find myself thinking of the consequences of failing." The CTAS has shown good internal consistency (α's ranging from .88 to .94 (Cassady, 2001; Cassady & Johnson, 2002) and good test-retest reliability (*r*'s ranging from .77 to .95; Cassady, 2001; Furlan, Cassady, & Perez, 2009). The CTAS has shown good convergent validity by correlating (*r* = .78; Cassady & Johnson, 2002) with the Reactions to Tests Scale (RTT; Sarason, 1984).

Fear of Negative Evaluation

Fear of negative evaluation was assessed using the Brief Fear of Negative Evaluation Scale II (BFNE-II; Leary, 1983). The BFNE-II, a 12-item self-report measure that assesses an individual's fear of being evaluated negatively, is a shortened adaptation of Watson and Friend's (1969) 30-item Fear of Negative Evaluation Scale. The items are rated on a 5-point Likert-scale (ranging from 1 = "not at all characteristic of me" to 5 = "entirely characteristic of me") with higher scores on the BFNE-II indicate higher levels of fear of negative evaluation. An item on the scale is, "I worry about what other people will think of me even when I know it doesn't make any difference." The BFNE-II correlates highly with the original version of the scale (*r* = .96; Leary, 1983). The BFNE-II has shown good internal consistency (α's ranging from .80 to .97; Carleton et al., 2007; Collins, Westra, Dozois, & Steward, 2005; Duke, Krishnan, Faith, & Storch, 2006; Rodebaugh, Woods, Thissen, Heimberg, & Chambless, 2004; Weeks et al., 2005), similar to the original Watson and Friend (1969) scale (*KR*-20 = .96). The BFNE-II has also

shown good test-retest reliability (r = .94; Collins et al. 2005), better than test-retest reliability of the original scale (r = .78 and .94 in two separate samples; Watson & Friend, 1969). Convergent validity has been tested by examining correlations between the BFNE-II with more general measures of social anxiety, such as the SPS (r = .61; Wong & Moulds, 2012) and the SIAS (r = .61; Wong & Moulds, 2012).

Fear of Positive Evaluation

Fear of positive evaluation was assessed using the Fear of Positive Evaluation Scale (FPES). The FPES is a 10-item self-report measure developed by Weeks and colleagues (2008a), and assesses one's fear of being evaluated positively. The items are rated on a 10-point Likert scale (ranging from 0 = "not at all true" to 9 = "very true") with higher scores indicating higher levels of fear of positive evaluation. An error was made when transferring the scale to Qualtrics, and the range of possible scale responses was changed from 0 to 9 to 1 to 9 instead. Thus, the FPES in our study ranged from 1 = "not at all true" to 9 = "very true." This issue is discussed in more detail in the limitations section. A sample item from the scale is "I am uncomfortable exhibiting my talents to others, even if I think my talents will impress them." The FPES has shown good internal consistency (α's ranging from .80-.86; Fergus et al., 2009; Rodebaugh et al., 2012; Weeks et al., 2008a; Weeks et al., 2008b; Weeks et al., 2010; Weeks et al., 2012) and good test-retest reliability (intraclass correlation coefficient = .70, r = .80; Weeks et al., 2008a; Weeks et al., 2012). Although the FPES is the only scale of its type , convergent validity has been tested by examining its correlation with more general measures of social anxiety, such as the SIAS (Mattick & Clarke, 1998) (r's ranging from .44-.48; Weeks et al., 2008a; Weeks et al., 2012) and the LSAS (Liebowitz, 1987) (r = .43; Weeks et al., 2012) as well FNE as measured by the BFNE-II (r = .45; Weeks et al., 2008a).

For this study, the FPES was adapted to provide a more ecologically valid assessment of public speaking and testing situations. The FPES was developed in research with social anxiety; thus, we wanted to make the items more relevant to public speaking and testing situations. To do so, items on the FPES were changed to reflect differences between these social evaluative situations. For example, an original item on the FPES that reads "I feel uneasy when I receive praise from authority figures" becomes "I feel uneasy when I receive praise on a speech from authority figures." The same item adapted for test anxiety becomes "I feel uneasy when I receive praise on my test score from authority figures." In sum, most adaptations involved relatively minor changes, typically adding phrases such as "when giving a speech," "when taking a test," and so forth. The adapted scales had good internal consistency for this study (α = .78 for public speaking anxiety FPES and α = .85 for test anxiety FPES).

Results

Descriptive statistics were calculated for the primary variables including means, standard deviations, and internal consistencies. Zero-order correlations were calculated to examine the main study variables and hypotheses (see Table 2). Finally, a moderation model was tested to address one of the main study hypotheses.

Descriptive Statistics

Descriptive statistics for all main study variables can be found in table 3. Cronbach's alpha was calculated for each scale. Alpha values for all scales were acceptable, ranging from .82-.97. The only exception was the PRPSA (α = .76), which was lower than previous studies but still satisfactory. Skewness and kurtosis values for each of the main study variables were within acceptable ranges (Lei & Lomax, 2005), with no skewness or kurtosis value exceeding one (see

Table 3). Likewise, means and standard deviations for the main study variables were compared were relevant to the existing literature and were generally similar.

To further describe the sample, cut-off scores were examined for scales assessing each of the social evaluative situations. For the SIAS, a cut-off score of 36 has been suggested by Peters (2000) to distinguish between individuals with clinical levels of social anxiety and those with sub-clinical levels. Using Peters (2000) cut-off score, 26 participants (21.3%) scored higher than 36 and thus may have clinical levels of social anxiety. For the PRPSA, McCrosky (1970) suggests a score above 98 reflects a moderate level of public speaking anxiety, and a score above 131 reflects a high level of public speaking anxiety. In our sample, 26 participants (21.5%) scored high in public speaking anxiety, and 69 participants (57%) scored in the moderate range. Cumulatively, 95 participants (78.5%) score either moderate or high in public speaking anxiety. Similar numbers have been found in the general population (Burnley, Cross, & Spanos, 1992). For the CTAS, Cassady (2001) suggests scores higher than 71 indicate high levels of test anxiety. Fifty-four participants (43.8%) scored high in test anxiety in our sample.

We also examined correlations between each of the social evaluative situations. As is consistent with prior literature, social anxiety was correlated with public speaking anxiety (r = .33, $p < .001$) and test anxiety (r = .28, p = .001). Furthermore, public speaking anxiety was correlated with test anxiety (r = .34, $p < .001$). Thus, although this sample is one of convenience, it is clear that many college students exhibit excessive evaluative anxiety and these are often linked to each other.

Main Hypotheses

Correlations were used to test hypotheses 1 to 3. To control for the number of correlations conducted, a Bonferroni correction was used and required a p value of .008 for

significance. Hypothesis 1 predicted a positive correlation between FNE and each of the social evaluative situations. Hypothesis 1 was supported. FNE was correlated with social anxiety (r = .61, p < .001), public speaking anxiety (r = .46, p < .001), and test anxiety (r = .24, p = .004).

Hypothesis 2a predicted a positive correlation between FPE and social anxiety. Following a Bonferroni correction (p < .008), hypothesis 2a was supported (r = .51, p < .001). Hypothesis 2b predicted that FPE would not be correlated with either public speaking anxiety or test anxiety and was partially supported. Following a Bonferroni correction, FPE was not correlated with public speaking anxiety (r = .22, p = .009), but FPE was correlated with test anxiety (r = .28, p = .001).

Hypothesis 3a predicted that social anxiety would act as a moderator in the relationship between FPE and public speaking anxiety. Social anxiety and FPE were entered into the same step of a regression equation predicting public speaking anxiety, and explained 11% of the variance (R^2 = .11, F(2, 118) = 7.55, p = .001). Next, an interaction variable was created by centralizing social anxiety and FPE and multiplying them together. This moderator variable was then added to the regression equation; the R^2 change was not significant (p = .001). Social anxiety did not moderate the relationship between FPE and public speaking anxiety (B = .02, p = .83).

Hypothesis 3b predicted that social anxiety would act as a moderator in the relationship between FPE and test anxiety. Social anxiety and FPE were entered into the same step of a regression equation predicting test anxiety, and explained 10% of the variance (R^2 = .10, F(2,118) = 6.74, p = .002). Next, an interaction variable was created by centralizing social anxiety and FPE and multiplying them together. This moderator variable was then added to the

regression equation; the R^2 change was not significant ($p = .007$). Social anxiety did not moderate the relationship between FPE and test anxiety ($B = -.09$, $p = .34$).

Exploratory Analyses

Given that hypothesis 3 was not supported, we wanted to further explore the relationship between fear of evaluation and the social evaluative situations. We ran regression analyses to determine predictors of FNE, FPE, and social anxiety.

Given that fear of negative evaluation was developed largely as a component of social anxiety, one of the questions we wanted to address was whether public speaking anxiety and test anxiety still predicted FNE after controlling for social anxiety. We examined test anxiety, public speaking anxiety, and social anxiety as predictors of FNE using linear regression, with all variables entered in the first step. Social anxiety, $\beta = .51$, $p < .001$ and public speaking anxiety, $\beta = .29$, $p < .001$ were found to be significant predictors (see Table 4) of FNE in the regression model. Test anxiety was not a significant predictor ($\beta = -.003$, $p = .96$).

In the second regression, we examined test anxiety, public speaking anxiety, and social anxiety as predictors of FPE using linear regression, with all variables entered in the first step. With this test, we were interested in examining whether social anxiety was still a significant predictor of FPE after controlling for public speaking anxiety and test anxiety. Only social anxiety, $\beta = .48$, $p < .001$ was found to be a significant predictor of FPE (see Table 5).

In the final regression, we examined test anxiety, public speaking anxiety, FNE, and FPE as predictors of social anxiety using hierarchical linear regression. FNE was entered in the first step, followed by FPE in the second step, and public speaking anxiety and test anxiety in the final step. In this manner, we could examine whether, after controlling for the overlap between these social evaluative situations, fear of evaluation would still predict social anxiety. FNE, $\beta =$

47, $p < .001$ and FPE, $\beta = .33$, $p < .001$ were significant predictors of social anxiety (see Table 6), whereas public speaking anxiety ($\beta = .02$, $p = .70$) and test anxiety ($\beta = .07$, $p = .32$) were not.

The final exploratory analysis focused on the public speaking anxiety and test anxiety adaptations of the FPES. We were curious if FPE would be correlated with public speaking anxiety or test anxiety when making the items on the FPES more specific to public speaking and testing situations. When examining the adapted scales, we found that both public speaking anxiety ($r = .37$, $p < .001$) and test anxiety ($r = .36$, $p < .001$) were correlated with FPE.

Discussion

This study examined fear of negative evaluation (FNE) and fear of positive evaluation (FPE) across social evaluative situations. This study also examined predictors of FNE, FPE, and social anxiety using linear regression. As discussed previously in this paper, there is much overlap between social anxiety, public speaking anxiety, and test anxiety. In this section, we consider our findings and discuss some of this overlap. This section ends with a discussion of limitations, directions for future research, and clinical implications.

Fear of Negative Evaluation

FNE was related to each of the social evaluative situations. Social anxiety had the strongest relationship with FNE, followed by public speaking anxiety and then test anxiety. Individuals with social anxiety often fear a wide range of social situations that involve the possibility of negative evaluation, from speaking with another person to carrying a lunch tray across a crowded cafeteria. Individuals with public speaking anxiety or test anxiety, in contrast, generally have fears narrower in scope, namely giving a speech or taking a test. This difference in the specific type of fear may explain why FNE has a stronger relationship with social anxiety than with public speaking or test anxiety.

But why would individuals fear negative evaluation? In their paper defining the construct of FNE, Watson and Friend (1969) state that FNE is similar to a fear of loss of social approval. Individuals with high FNE are fearful of people forming an unfavorable impression of them or noticing their shortcomings. An individual with social anxiety fears that other people will form an unfavorable impression based on her/his social interaction skills, or as mentioned earlier, other activities such as carrying a lunch tray across a crowded cafeteria. Although FNE is less strongly related to public speaking of test anxiety, many people with these types of concerns clearly also have elevated FNE. An individual with either public speaking or test anxiety may be fearful that individuals will form an unfavorable impression based on her/his public speaking or testing skills.

Given that each of the social evaluative situations was linked to FNE, and they are all related highly with each other, we entered them all as predictors of FNE to see where the variance partialled out. When entering social anxiety, public speaking anxiety, and test anxiety together, social anxiety and public speaking anxiety predicted FNE, but test anxiety did not. Given that test anxiety was initially only weakly related to FNE, this finding is not surprising, but why?

Test anxiety fears are narrower in content; whereas social anxiety fears tend to be broader. That is, test anxiety concerns are generally specific to testing and grade situations; whereas persons with social anxiety may fear a wide range of evaluative and social situations. To illustrate this point we can examine two items from the CTAS. The item, "During tests, the thought frequently occurs to me that I may not be too bright," reflects a highly specific testing situation. A second item, "During tests, I find myself thinking of the consequences of failing," seems broader in nature given that it could have multiple interpretations. For example, an

individual with test anxiety may fear consequences unrelated to negative social evaluation ("If I do poorly, then I'll have to spend money re-taking this class."); whereas an individual with social anxiety may fear consequences centering on negative social evaluation ("If I do poorly, then my teacher will think I am stupid."). For individuals with test anxiety, they may fear consequences of failing that are unrelated to negative social evaluation; whereas individuals with social anxiety seem more likely to fear consequences focusing on negative evaluation. Their cognitions may be similar to items on the BFNE-II, such as, "I am afraid others will not approve of me," and "I am frequently afraid of other people noticing my shortcomings." If that were the case, it would explain why test anxiety is not a predictor of FNE when entered into the same step of a regression model.

Our findings for FNE and public speaking and test anxiety are the most notable, as the literature examining these relationships is less robust than the literature supporting FNE as a correlate of social anxiety. It seems likely that public speaking anxiety and test anxiety have received less attention than social anxiety in terms of examining a relationship with FNE because they are often regarded as subtypes of social anxiety. Furthermore, public speaking anxiety and test anxiety are not DSM-5 diagnoses. Another reason may be that social anxiety is more of a clinical phenomenon and is therefore more widely studied in the clinical psychology literature; in contrast, public speaking anxiety and in particular test anxiety are more commonly subsumed into the educational literature.

Fear of Positive Evaluation

The most intriguing findings of the study perhaps were those concerning FPE. The finding linking FPE to social anxiety adds to a growing body of literature demonstrating a link between social anxiety and FPE. The most surprising finding was the link between FPE and test

anxiety. So why is FPE related to test anxiety? Although social anxiety, public speaking anxiety, and test anxiety are all highly associated, it was predicted that there may be something unique about social anxiety linking it to FPE; whereas public speaking anxiety and test anxiety would not be related to FPE. For example, someone with public speaking anxiety or test anxiety may become excited or proud to receive a compliment in front of others following a speech or test, improving her/his confidence for the next performance. In other words, individuals with public speaking anxiety or test anxiety would lack the fear of being in the spotlight and the fear of higher future expectations not being met. However, this assumption was not upheld as test anxiety was correlated with FPE. The theory behind the association between FPE and social anxiety is that individuals fear that a good performance will increase expectations for the future, which they fear they will be unable to meet, resulting in possible future negative evaluation. The same perspective can be applied to test anxiety. Individuals may fear that if they perform well, expectations will be higher in the future, and they fear they may not be able to meet expectations, resulting in possible future negative evaluation. However, individuals with social anxiety may differ from individuals with test anxiety in terms of why they fear positive evaluation. For individuals with social anxiety, a simpler explanation for their fear of positive evaluation may be that these individuals want to avoid being the focus of attention, not necessarily or not only because they fear they will be unable to meet future expectations but because scoring well may draw attention to them. The teacher may praise an individual with social anxiety for receiving a high test score in front of the class, which may cause the individual to feel "in the spotlight," as the Gilbert (2001) model of social anxiety states. Whereas, the individual with test anxiety may not fear being in the spotlight, but would fear not being able to meet the higher future expectations.

So why was FPE related to test anxiety but not public speaking anxiety? An explanation may lie in the type of cognitions experienced by an individual in a public speaking situation. Public speaking anxiety had a much stronger relationship to FNE than did test anxiety. It seems that when individuals are presented with the prospect of giving a speech they may be more worried about the performance and the subsequent negative evaluation rather than the consequences of a good speech. Items on the PRPSA that seem to indicate more of a fear of negative evaluation than positive evaluation include, "I am in constant fear of forgetting what I prepared to say," and "I do poorer on speeches because I am anxious." Perhaps part of the reason public speaking anxiety is not related to FPE is the immediacy of feedback on the task letting one know how they are performing. With a speech, an individual can be evaluated negatively on the spot, via bored looks, snickers, and so forth. With the threat of negative evaluation being so readily visible, perhaps fearing being positively praised on a speech and therefore having higher future expectations is the last thing on a person's mind. Also, with public speaking anxiety, the individual giving the speech is the focus of attention; whereas with test anxiety, there are typically many individuals taking a test at the same time, or an individual could be taking an online test at home with no potential audience. The focus of attention is not directly on one individual in a testing situation, which could help explain why individuals in public speaking situations fear negative evaluation more.

The public speaking adaptation of the FPES developed for this study was correlated with the PRPSA. Likewise the test anxiety adaptation of the FPES designed for this study was correlated with the CTAS. The public speaking results are of particular interest as public speaking was not correlated with FPE with the original version of the FPES. The original version of the FPES was correlated with test anxiety, although not as strongly as with the adapted

version. These results indicate that across social evaluative situations, people do fear positive evaluation. However, to accurately assess for fear of positive evaluation, questionnaire items need to be made specific to the situation. If an individual with high levels of public speaking anxiety is taking the original version of the FPES, then she/he may see the item, "I am uncomfortable exhibiting my talents to others, even if I think my talents will impress them," and provide a lower number, such as 0 or 1, assuming that the scale is asking about talents in a very general sense (i.e., any talent). However, if she/he is taking the public speaking adaptation, then she/he would see the item re-worded as, "I am uncomfortable exhibiting my public speaking talents to others, even if I think my talents will impress them," and the answer may be completely different. The same holds true for individuals with test anxiety.

What was surprising was that test anxiety was more strongly related to FPE than FNE. Perhaps this finding can also be explained by the immediacy of feedback on the task. Examining an item on the CTAS, "During tests, I find myself thinking of the consequences of failing," could mean either negative or positive consequences. An individual might fear negative consequences, such as being perceived as stupid, or positive consequences, such as scoring well and being expected to score well in the future. The consequences associated with testing are typically future consequences (i.e., receiving the grade), rather than being evaluated negatively during a testing situation. With public speaking anxiety, many individuals are likely relieved following a speech, having already experienced the most dreaded part of the situation (the speech itself); whereas following a testing situation, one must now wait for her/his score. With more time to think during this waiting period, an individual may be more likely to think of and fear the positive as well as the negative consequences of her/his score, with the positive consequences outweighing the negative.

Given the finding that FPE was related to test anxiety, we were curious if FPE would still be related to test anxiety when social anxiety and public speaking anxiety were entered along with test anxiety into the same step of a regression equation. In a regression analysis, we found that only social anxiety predicted FPE. When all three were entered into the same step of a regression, it seems that there was little unique variance.

Our moderation results were surprising, especially the failure of social anxiety to moderate the relationship between public speaking anxiety and FPE. We hypothesized that the audience component in both public speaking anxiety and social anxiety would make social anxiety a moderator in this relationship. An individual with only public speaking anxiety was not expected to fear positive evaluation, just as an individual with only test anxiety was not expected to fear positive evaluation. However, if the individual also had high levels of social anxiety, then perhaps the cognitions about public speaking or testing would center on or include positive evaluation fears. An item on the PRPSA that reads, "When the instructor announces a speaking assignment in class, I can feel myself getting tense," may evoke both fears of negative and positive evaluation for an individual with social anxiety. They might fear being evaluated negatively during the speech, but they also may fear that if they do well, they will be expected to do well in the future and they may not be able to meet expectations. The same applies for an individual with both test anxiety and social anxiety. That person may fear the consequences of failing, both negative consequences, such as being perceived as stupid, and positive consequences, such as higher expectations in the future which they may not be able to meet. As mentioned earlier in this section, a person with social anxiety may fear being the center of attention of attention, which may happen if they are positively evaluated in front of others. Given that individuals with social anxiety tend to avoid being the center of attention through various

means (e.g., avoiding eye contact, avoidance of self-disclosure; Clark & Wells, 1995), it follows that they would desire to avoid being evaluated positively, perhaps not only just for the fear of failing to meet higher future expectations, but also because they fear being the center of attention.

Limitations

Of the 172 initial participants, 50 had their data deleted for various reasons. Many participants were deleted because of large amounts of missing data. However, despite deleting 50 participants, we still had 31 more participants than our power analysis recommended. Another limitation was that the Fear of Positive Evaluation Scale was incorrectly administered as a 9 point scale (1-9) instead of a 10 point scale (0-9). It seems unlikely that this mistake had any significant effects on our results and the FPES had good internal consistency ($\alpha = .82$), but it does prevent us from comparing our means and standard deviations on the Fear of Positive Evaluation Scale with means and standard deviations from other studies. Another limitation was that, although the adapted scales had good alpha coefficients, there is no established validity for the scales and no test-retest reliability. Furthermore, certain items were difficult to adapt, and therefore we are unsure if the construct was accurately assessed on those items.

Directions for Future Research

Given that FPE was correlated more strongly with public speaking anxiety and test anxiety after the FPES was made specific to those situations, future research on FPE may want to consider adapting scales that are specific to the construct being studied, rather than using the original FPES. The scales were promising but could use more research on the psychometrics. Furthermore, as with our exploratory analyses, future research would benefit from running

regression analyses on the correlates of FPE they are examining, given that when we ran regression analyses, we found very little unique variance.

As mentioned earlier, not much research has been done examining FNE and public speaking or test anxiety, possibly because they lack DSM diagnoses. Given the high prevalence of the two situations, more research examining the relationship between FNE and those situations would be welcomed. Future research may want to consider adapting the BFNE-II for public speaking anxiety and test anxiety, as we adapted the FPES for public speaking anxiety and test anxiety. Perhaps FNE would have a stronger relationship with both public speaking anxiety and test anxiety if the items were made specific to public speaking and testing situations.

Clinical Implications

An individual with social anxiety appears to fear situations in which any kind of evaluation may take place, whether negative or positive. Cognitive-behavioral interventions traditionally have focused on negative social evaluative situations (Weeks et al., 2008a). The growing body of literature supporting FPE as a correlate of social anxiety suggests that clinicians should consider incorporating interventions specifically focused on an individual's fear of positive evaluation, which is useful considering that clients may have distorted cognitions associated with FPE. Therefore a therapy group that includes individuals with social anxiety as well as individuals who only fear public speaking may not be effective if clinicians only focus on FNE and disregard FPE. In fact, Weeks and Howell (2012) caution that failure to address FPE may cause individuals with social anxiety clinically significant distress during the debriefing of successful exposures when their therapists provide positive feedback about their progress.

Other findings with important clinical implications include the findings related to the adapted scales. Perhaps the original FPES is not the best instrument to assess FPE in individuals

without social anxiety concerns, but rather have other social evaluative fears, such as public speaking or testing. When the FPES was adapted to be more specific to public speaking or testing, it correlated more strongly with the PRPSA and the CTAS.

Given that FNE was correlated with each of the social evaluative situations, clinicians should explore with their clients from whom they fear evaluation. For example, an individual with social anxiety might fear many social situations, and it would behoove clinicians to determine if testing and public speaking are among those situations, as they could be negatively impacting the client's life, especially if she/he is a student or has to give presentations for her/his job.

References

Aderka, I. M., Haker, A., Marom, S., Hermesh, H., & Gilboa-Schechtman, E. (2013). Information-seeking bias in social anxiety disorder. *Journal of Abnormal Psychology*, *122*(1), 7-12. doi:10.1037/a0029555

American Psychiatric Association (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., rev.). Washington, DC: Author.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.

American Psychiatric Association. (2013) *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

Amin, N., Foa, E. B., & Coles, M. E. (1998). Negative interpretation bias in social phobia. *Behaviour Research and Therapy*, *36*(10), 945-957.

Beesdo-Baum, K. K., Knappe, S. S., Fehm, L. L., Höfler, M. M., Lieb, R. R., Hofmann, S. G., & Wittchen, H. U. (2012). The natural course of social anxiety disorder among adolescents and young adults. *Acta Psychiatrica Scandinavica*, *126*(6), 411-425. doi:10.1111/j.1600-0447.2012.01886.x

Behnke, R. R., & Beatty, M. J. (1981). A cognitive-physiological model of speech anxiety. *Communication Monographs*, *48*(2), 158.

Beidel, D. C. (1988). Psychophysiological assessment of anxious emotional states in children. *Journal of Abnormal Psychology*, *97*(1), 80-82. doi:10.1037/0021-843X.97.1.80

Beidel, D. C., & Turner, S. M. (1988). Comorbidity of test anxiety and other anxiety disorders in children. *Journal of Abnormal Child Psychology*, *16*(3), 275-287. doi:10.1007/BF00913800

Beidel, D. C., Turner, S. M., & Dancu, C. V. (1985). Physiological, cognitive and behavioral aspects of social anxiety. *Behaviour Research and Therapy*, *23*(2), 109-117. doi:10.1016/0005-7967(85)90019-1

Blöte, A. W., Kint, M. W., Miers, A. C., & Westenberg, P. (2009). The relation between public speaking anxiety and social anxiety: A review. *Journal of Anxiety Disorders*, *23*(3), 305-313. doi:10.1016/j.janxdis.2008.11.007

Bodie, G. D. (2010). A racing heart, rattling knees, and ruminative thoughts: Defining, explaining, and treating public speaking anxiety. *Communication Education*, *59*(1), 70-105.

Brown, S. D., & Nelson, T. L. (1983). Beyond the uniformity myth: A comparison of academically successful and unsuccessful test-anxious college students. *Journal of Counseling Psychology*, *30*(3), 367-374. doi:10.1037/0022-0167.30.3.367

Burnley, M., Cross, P. A., & Spanos, N. P. (1992). The effects of stress inoculation training and skills training on the treatment of speech anxiety. *Imagination, Cognition and Personality*, *12*(4), 355-366.

Butler, G. (1985). Exposure as a treatment for social phobia: some instructive difficulties. *Behaviour Research and Therapy*, *23*(6), 651-657. doi:10.1016/0005-7967(85)90060-9

Carleton, R., Collimore, K. C., & Asmundson, G. G. (2007). Social anxiety and fear of negative evaluation: Construct validity of the BFNE-II. *Journal of Anxiety Disorders*, *21*(1), 131-141. doi:10.1016/j.janxdis.2006.03.010

Carleton, R., Collimore, K. C., McCabe, R. E., & Antony, M. M. (2011). Addressing revisions to the brief fear of negative evaluation scale: Measuring fear of negative evaluation across anxiety and mood disorders. *Journal of Anxiety Disorders*, *25*(6), 822-828. doi:10.1016/j.janxdis.2011.04.002

Cassady, J. C. (2001). The stability of undergraduate students' cognitive test anxiety levels. *Practical Assessment, Research and Evaluation*, *7*(20). Retrieved from http://pareonline.net/getvn.asp?v=7&n=20

Cassady, J. C., & Johnson, R. E. (2002). Cognitive test anxiety and academic performance. *Contemporary Educational Psychology*, *27*(2), 270. doi:10.1006/ceps.2001.1094

Chen, Z. (2002). For fear of negative evaluation and test anxiety in middle school students. *Chinese Mental Health Journal*, *16*(12), 855-857.

Clark, D. M., & Wells, A. (1995). A cognitive model of social phobia. In R. G. Heimberg, M. R. Liebowitz, D. A. Hope, & F. R. Scheier (Eds.), *Social phobia: Diagnosis, assessment, and treatment* (pp. 69-93). New York: Guilford Press.

Collins, K. A., Westra, H. A., Dozois, D. A., & Stewart, S. H. (2005). The validity of the brief version of the fear of negative evaluation scale. *Journal of Anxiety Disorders*, *19*(3), 345-359. doi:10.1016/j.janxdis.2004.02.003

Cox, B. J., Clara, I. P., Sareen, J., & Stein, M. B. (2008). The structure of feared social situations among individuals with a lifetime diagnosis of social anxiety disorder in two independent nationally representative mental health surveys. *Behaviour Research and Therapy*, *46*(4), 477-486. doi:10.1016/j.brat.2008.01.011

Culler, R. E., & Holahan, C. J. (1980). Test anxiety and academic performance: The effects of study-related behaviors. *Journal of Educational Psychology*, *72*(1), 16-20. doi:10.1037/0022-0663.72.1.16

Daly, J. A., McCroskey, J. C., Ayres, J., Hopf, T., & Ayres, D. M. (1997). *Avoiding communication: Shyness, reticence, and communication apprehension* (2nd ed.). Cresskill, NJ: Hampton Press.

Davidson, J. R., Hughes, D. L., George, L. K., & Blazer, D. G. (1993). The epidemiology of social phobia: Findings from the duke epidemiological catchment area study. *Psychological Medicine*, *23*(3), 709-718. doi: 10.1017/S0033291700025484

Deffenbacher, J. L., & Payne, D. M. (1978). Relationship of apprehension about communication to fear of negative evaluation and assertiveness. *Psychological Reports*, *42*(2), 370. doi:10.2466/pr0.1978.42.2.370

Deiters, D. D., Stevens, S., Hermann, C., & Gerlach, A. L. (2013). Internal and external attention in speech anxiety. *Journal of Behavior Therapy and Experimental Psychiatry*, *44*(2), 143-149. doi:10.1016/j.jbtep.2012.09.001

Duke, D., Krishnan, M., Faith, M., & Storch, E. A. (2006). The psychometric properties of the brief fear of negative evaluation scale. *Journal of Anxiety Disorders*, *20*(6), 807-817. doi:10.1016/j.janxdis.2005.11.002

Eng, W. W., Heimberg, R. G., Coles, M. E., Schneier, F. R., & Liebowitz, M. R. (2000). An empirical approach to subtype identification in individuals with social phobia. *Psychological Medicine*, *30*(6), 1345-1357. doi:10.1017/S0033291799002895

Fergus, T. A., Valentiner, D. P., McGrath, P. B., Stephenson, K., Gier, S., & Jencius, S. (2009). The fear of positive evaluation scale: psychometric properties in a clinical sample. *Journal of Anxiety Disorders*, *23*(8), 1177-1183. doi:10.1016/j.janxdis.2009.07.024

Finn, A. N., Sawyer, C. R., & Behnke, R. R. (2009). A model of anxious arousal for public speaking. *Communication Education*, *58*(3), 417-432.

Flett, G. L., Blankstein, K. R., & Boase, P. (1987). Self-focused attention in test anxiety and depression. *Journal of Social Behavior and Personality*, *2*(2, Pt 1), 259-266.

Furlan, L., Cassady, J. C., & Perez, E. (2009). Adapting the Cognitive Test Anxiety Scale for use with Argentinean university students. *International Journal of Testing*, *9*(1), 3-19.

Furmark, T., Tillfors, M. M., Stattin, H. H., Ekselius, L. L., & Fredrikson, M. M. (2000). Social phobia subtypes in the general population revealed by cluster analysis. *Psychological Medicine*, *30*(6), 1335-1344. doi:10.1017/S0033291799002615

Galassi, J. P., Frierson, H. T., & Sharer, R. (1981). Behavior of high, moderate, and low test anxious students during an actual test situation. *Journal of Consulting and Clinical Psychology*, *49*(1), 51-62. doi:10.1037/0022-006X.49.1.51

Gilbert, P. (2001). Evolution and social anxiety: The role of attraction, social competition, and social hierarchies. *Psychiatric Clinics of North America*, *24*(4), 723-751. doi:10.1016/S0193-953X(05)70260-4.

Goldfried, M. R., Linehan, M. M., & Smith, J. L. (1978). Reduction of test anxiety through cognitive restructuring. *Journal of Consulting and Clinical Psychology*, *46*(1), 32-39. doi:10.1037/0022-006X.46.1.32

Greenberg, P. E., Sisitsky, T., Kessler, R. C., Finkelstein, S. N., Berndt, E. R., Davidson, J. T., & Fyer, A. J. (1999). The economic burden of anxiety disorders in the 1990s. *Journal of Clinical Psychiatry*, *60*(7), 427-435. doi:10.4088/JCP.v60n0702

Hackmann, A., Clark, D. M., & McManus, F. (2000). Recurrent images and early memories in social phobia. *Behaviour Research and Therapy*, *38*(6), 601-610. doi:10.1016/S0005-7967(99)00161-8

Hackmann, A., Surawy, C., & Clark, D. M. (1998). Seeing yourself through others' eyes: A study of spontaneously occurring images in social phobia. *Behavioural and Cognitive Psychotherapy*, *26*(1), 3-12. doi:10.1017/S1352465898000022

Heeren, A., Ceschi, G., Valentiner, D. P., Dethier, V., & Philippot, P. (2013). Assessing public speaking fear with the short form of the personal report of confidence as a speaker scale: Confirmatory factor analyses among a French-speaking community sample. *Neuropsychiatric Disease and Treatment*, *9*. 609-618.

Heimberg, R. C., Brozovich, F. A., & Rapee, R. M. (2010). A cognitive behavioral model of social anxiety disorder: Update and extension. In S. G. Hofmann, P. M. DiBartolo (Eds.), *Social anxiety: Clinical, developmental, and social perspectives (2nd ed.)* (pp. 395-422). San Diego, CA: Elsevier Academic Press. doi:10.1016/B978-0-12-375096-9.00015-8

Heimberg, R. G., Hope, D. A., Dodge, C. S., & Becker, R. E. (1990). DSM-III—R subtypes of social phobia: Comparison of generalized social phobics and public speaking phobics. *Journal of Nervous and Mental Disease*, *178*(3), 172-179. doi:10.1097/00005053-199003000-00004

Hindo, C. S., & González-Prendes, A. (2011). One-session exposure treatment for social anxiety with specific fear of public speaking. *Research on Social Work Practice*, *21*(5), 528-538. doi:10.1177/1049731510393984

Hofmann, S. G. (2007). Cognitive factors that maintain social anxiety disorder: A comprehensive model and its treatment implications. *Cognitive Behaviour Therapy*, *36*(4), 193-209. doi:10.1080/16506070701421313

Hofmann, S. G., Heinrichs, N., & Moscovitch, D. A. (2004). The nature and expression of social phobia: Toward a new classification. *Clinical Psychology Review*, *24*(7), 769-797. doi:10.1016/j.cpr.2004.07.004

Holt, C. S., Heimberg, R. G., & Hope, D. A. (1992). Avoidant personality disorder and the generalized subtype of social phobia. *Journal of Abnormal Psychology*, *101*(2), 318-325. doi:10.1037/0021-843X.101.2.318

Hopko, D. R. (2003). Confirmatory factor analysis of the math anxiety rating scale-revised. *Educational and Psychological Measurement*, *63*(2), 336.

Horvath, N. R., Moss, M. N., Shung, X., Sawyer, C. R., & Behnke, R. R. (2004). Evaluation sensitivity and physical sensations of stress as components of public speaking state anxiety. *Southern Communication Journal*, *69*(2), 173-181.

Hunter, K. M., Westwick, J. N., & Haleta, L. L. (2014). Assessing Success: The impacts of a fundamentals of speech course on decreasing public speaking anxiety. *Communication Education*, *63*(2), 124-135. doi:10.1080/03634523.2013.875213

Kessler, R. C. (2003). The impairments caused by social phobia in the general population: Implications for intervention. *Acta Psychiatrica Scandinavica*, *10*(8), 19-27. doi:10.1034/j.1600-0447.108.s417.2.x

Kessler, R. C., Stein, M. B., & Berglund, P. (1998). Social phobia subtypes in the national comorbidity survey. *The American Journal of Psychiatry*, *155*(5), 613-619.

King, N. J., Mietz, A., Tinney, L., & Ollendick, T. H. (1995). Psychopathology and cognition in adolescents experiencing severe test anxiety. *Journal of Clinical Child Psychology*, *24*(1), 49.

Kirkland, K., & Hollandsworth, J. G. (1980). Effective test taking: Skills-acquisition versus anxiety-reduction techniques. *Journal of Consulting and Clinical Psychology*, *48*(4), 431-439. doi:10.1037/0022-006X.48.4.431

Knappe, S., Beesdo-Baum, K., Fehm, L., Stein, M. B., Lieb, R., & Wittchen, H. (2011). Social fear and social phobia types among community youth: Differential clinical features and vulnerability factors. *Journal of Psychiatric Research*, *45*(1), 111-120. doi:10.1016/j.jpsychires.2010.05.002

Leary, M. R. (1983). A brief version of the fear of negative evaluation scale. *Personality and Social Psychology Bulletin*, *9*(3), 371-375. doi:10.1177/0146167283093007

LeBeau, R. T., Glenn, D., Liao, B., Wittchen, H., Beesdo-Baum, K., Ollendick, T., & Craske, M. G. (2010). Specific phobia: A review of DSM-IV specific phobia and preliminary recommendations for DSM-V. *Depression and Anxiety*, *27*(2), 148-167. doi:10.1002/da.20655

Lei, M., & Lomax, R. G. (2005). The effect of varying degrees of nonnormality in structural equation modeling. *Structural Equation Modeling*, *12*(1), 1-27. doi:10.1207/s15328007sem1201_1

Levinson, C. A., & Rodebaugh, T. L. (2012). Social anxiety and eating disorder comorbidity: The role of negative social evaluation fears. *Eating Behaviors*, *13*(1), 27-35. doi:10.1016/j.eatbeh.2011.11.006

Levinson, C. A., Rodebaugh, T. L., White, E. K., Menatti, A. R., Weeks, J. W., Iacovino, J. M., & Warren, C. S. (2013). Social appearance anxiety, perfectionism, and fear of negative evaluation. Distinct or shared risk factors for social anxiety and eating disorders? *Appetite*, 67, 125-133. doi:10.1016/j.appet.2013.04.002

Liebowitz, M. R. (1987). Social phobia. *Modern Problems of Pharmacopsychiatry*, *22,* 141-173.

Lowe, P. A., Lee, S. W., Witteborg, K. M., Prichard, K. W., Luhr, M. E., Cullinan, C. M., & Janik, M. (2008). The Test Anxiety Inventory for Children and Adolescents (TAICA): Examination of the psychometric properties of a new multidimensional measure of test anxiety among elementary and secondary school students. *Journal of Psychoeducational Assessment*, *26*(3), 215-230. doi:10.1177/0734282907303760

MacIntyre, P. D., & Thivierge, K. A. (1995). The effects of speaker personality on anticipated reactions to public speaking. *Communication Research Reports*, *12*(2), 125-133. doi:10.1080/08824099509362048

Makkar, S., & Grisham, J. (2011). The predictors and contents of post-event processing in social anxiety. *Cognitive Therapy and Research*, *35*(2), 118-133. doi:10.1007/s10608-011-9357-z

Mansell, W., & Clark, D. M. (1999). How do I appear to others? Social anxiety and processing of the observable self. *Behaviour Research and Therapy*, *37*(5), 419.

Mannuzza, S., Schneier, F. R., Chapman, T. F., Liebowitz, M. R., Klein, D. F., & Fyer, A. J. (1995). Generalized social phobia: Reliability and validity. *Archives of General Psychiatry*, *52*(3), 230-237. doi:10.1001/archpsyc.1995.03950150062011

Marks, I. M., & Mathews, A. M. (1979). Brief standard self-rating for phobic patients. *Behaviour Research and Therapy*, *17*(3), 263-267. doi:10.1016/0005-7967(79)90041-X

Mattick, R. P., & Clarke, J. (1998). Development and validation of measures of social phobia scrutiny fear and social interaction anxiety. *Behaviour Research and Therapy*, *36*(4), 455-470.

McCrosky, J. (1970). Special reports: Measures of communication-bound anxiety. *Speech Monographs*, *37*(4), 268-277.

McDonald, A. S. (2001). The prevalence and effects of test anxiety in school children. *Educational Psychology*, *21*(1), 89-101. doi:10.1080/01443410020019867

Meichenbaum, D., & Butler, L. (1980). Toward a conceptual model for the treatment of test anxiety: Implications for research and treatment. In I. G. Sarason (Ed.), *Test anxiety: Theory, research, and applications* (pp. 187-208). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Naveh-Benjamin, M., McKeachie, W. J., Lin, Y., & Holinger, D. P. (1981). Test anxiety: Deficits in information processing. *Journal of Educational Psychology*, *73*(6), 816-824. doi:10.1037/0022-0663.73.6.816

Niquee, F., & Samadi, A. (2013). Fear of negative evaluation and fear of positive evaluation in social anxiety. *Switzerland Research Park Journal, 102*(7), 550-557.

Ollendick, T. H. (1983). Reliability and validity of the Revised Fear Survey Schedule for Children (FSSC-R). *Behaviour Research and Therapy*, *21*(6), 685-692. doi:10.1016/0005-7967(83)90087-6

Ollendick, T. H., King, N. J., & Frary, R. B. (1989). Fears in children and adolescents: Reliability and generalizability across gender, age and nationality. *Behaviour Research and Therapy*, *27*(1), 19-26. doi:10.1016/0005-7967(89)90115-0

Perugi, G. G., Nassini, S. S., Maremmani, I. I., Madaro, D. D., Toni, C. C., Simonini, E. E., & Akiskal, H. S. (2001). Putative clinical subtypes of social phobia: A factor-analytical study. *Acta Psychiatrica Scandinavica*, *104*(4), 280-288. doi:10.1034/j.1600-0447.2001.00128.x

Peters, L. (2000). Discriminant validity of the Social Phobia and Anxiety Inventory (SPAI), the Social Phobia Scale (SPS) and the Social Interaction Anxiety Scale (SIAS). *Behaviour Research and Therapy*, *38*(9), 943-950. doi:10.1016/S0005-7967(99)00131-X

Prins, P. M., Groot, M. M., & Hanewald, G. P. (1994). Cognition in test-anxious children: The role of on-task and coping cognition reconsidered. *Journal of Consulting And Clinical Psychology*, *62*(2), 404-409. doi:10.1037/0022-006X.62.2.404

Rapee, R. M., & Heimberg, R. G. (1997). A cognitive-behavioral model of anxiety in social phobia. *Behaviour Research and Therapy*, *35*(8), 741-756.

Rapee, R. M., & Lim, L. (1992). Discrepancy between self- and observer ratings of performance in social phobics. *Journal of Abnormal Psychology*, *101*(4), 728.

Rodebaugh, T. L., Weeks, J. W., Gordon, E. A., Langer, J. K., & Heimberg, R. G. (2012). The longitudinal relationship between fear of positive evaluation and fear of negative evaluation.

Anxiety, Stress and Coping: An International Journal, *25*(2), 167-182. doi:10.1080/10615806.2011.569709

Rodebaugh, T. L., Woods, C. M., Thissen, D. M., Heimberg, R. G., Chambless, D. L., & Rapee, R. M. (2004). More information from fewer questions: The factor structure and item properties of the original and Brief Fear of Negative Evaluation Scale. *Psychological Assessment*, *16*(2), 169-181. doi:10.1037/1040-3590.16.2.169

Safren, S. A., Heimberg, R. G., Horner, K. J., Juster, H. R., Schneier, F. R., & Liebowitz, M. R. (1999). Factor structure of social fears: The Liebowitz Social Anxiety Scale. *Journal of Anxiety Disorders*, *13*(3), 253-270. doi:10.1016/S0887-6185(99)00003-1

Sarason, I. G. (1975). Test anxiety, attention, and the general problem of anxiety. In C. D. Spielberger & I. G. Sarason (Eds.), *Stress and Anxiety* (Vol. 1, pp. 165-188). Washington, D.C.: Hemisphere Publishing Corporation.

Sarason, I. G. (1984). Stress, anxiety, and cognitive interference: Reactions to tests. *Journal of Personality and Social Psychology*, *46*(4), 929-938. doi:10.1037/0022-3514.46.4.929

Schlenker, B. R., & Leary, M. R. (1982). Social anxiety and self-presentation: A conceptualization model. *Psychological Bulletin*, *92*(3), 641-669.

Schneier, F. R., Spitzer, R. L., Gibbon, M., Fyer, A. J., & Liebowitz, M. R. (1991). The relationship of social phobia subtypes and avoidant personality disorder. *Comprehensive Psychiatry*, *32*(6), 496-502. doi:10.1016/0010-440X(91)90028-B

Sieber, J. E., O'Neil Jr., H. F., & Tobias, S. (1977). *Anxiety, Learning and Instruction.* Hilldale, NJ: Erlbaum.

Smith, R. E., & Sarason, I. G. (1975). Social anxiety and the evaluation of negative interpersonal feedback. *Journal of Consulting and Clinical Psychology*, *43*(3), 429. doi:10.1037/h0076855

Stein, M. B., & Deutsch, R. (2003). In search of social phobia subtypes: Similarity of feared social situations. *Depression and Anxiety, 17*(2), 94-97.

Stein, M. B., Tancer, M. E., Gelernter, C. S., Vittone, B. J., & Uhde, T. W. (1990). Major depression in patients with social phobia. *The American Journal of Psychiatry*, *147*(5), 637-639

Stein, M. B., Torgrud, L. J., & Walker, J. R. (2000). Social phobia symptoms, subtypes, and severity: Findings from a community survey. *Archives of General Psychiatry*, *57*(11), 1046-1052. doi:10.1001/archpsyc.57.11.1046

Stein, M. B., Walker, J. R., & Forde, D. R. (1996). Public speaking fears in a community sample: Prevalence, impact on functioning, and diagnostic classification. *Archives of General Psychiatry*, *53*(2), 169-174. doi:10.1001/archpsyc.1996.01830020087010

Stemberger, R., Turner, S. M., Beidel, D. C., & Calhoun, K. S. (1995). Social phobia: An analysis of possible developmental factors. *Journal of Abnormal Psychology*, *104*(3), 526-531. doi:10.1037/0021-843X.104.3.526

Stopa, L., & Clark, D. M. (1993). Cognitive processes in social phobia. *Behaviour Research and Therapy*, *31*(3), 255-267.

Stopa, L., & Clark, D. M. (2000). Social phobia and interpretation of social events. *Behaviour Research and Therapy*, *38*(3), 273-283.

Turner, B. G., Beidel, D. C., Hughes, S., & Turner, M. W. (1993). Text anxiety in African American school children. *School Psychology Quarterly*, *8*(2), 140-152. doi:10.1037/h0088835

Turner, S. M., Beidel, D. C., & Larkin, K. T. (1986). Situational determinants of social anxiety in clinic and nonclinic samples: Physiological and cognitive correlates. *Journal of Consulting and Clinical Psychology*, *54*(4), 523-527. doi:10.1037/0022-006X.54.4.523

Turner, S. M., Beidel, D. C., & Townsley, R. M. (1992). Social phobia: A comparison of specific and generalized subtypes and avoidant personality disorder. *Journal of Abnormal Psychology*, *101*(2), 326-331. doi:10.1037/0021-843X.101.2.326

Voncken, M. J., & Bögels, S. M. (2008). Social performance deficits in social anxiety disorder: Reality during conversation and biased perception during speech. *Journal of Anxiety Disorders*, *22*(8), 1384-1392. doi:10.1016/j.janxdis.2008.02.001

Vriends, N., Becker, E. S., Meyer, A., Michael, T., & Margraf, J. (2007). Subtypes of social phobia: Are they of any use? *Journal of Anxiety Disorders*, *21*(1), 59-75. doi:10.1016/j.janxdis.2006.05.002

Wallace, S. T., & Alden, L. E. (1995). Social anxiety and standard setting following social success or failure. *Cognitive Therapy and Research*, *19*(6), 613-631.

Wallace, S. T., & Alden, L. E. (1997). Social phobia and positive social events: The price of success. *Journal of Abnormal Psychology*, *106*(3), 416-424. doi:10.1037/0021-843X.106.3.416

Wang, W., Hsu, W., Chiu, Y., & Liang, C. (2012). The hierarchical model of social interaction anxiety and depression: The critical roles of fears of evaluation. *Journal of Anxiety Disorders*, *26*(1), 215-224. doi:10.1016/j.janxdis.2011.11.004

Watson, D., & Friend, R. (1969). Measurement of social-evaluative anxiety. *Journal of Consulting and Clinical Psychology*, *33*(4), 448-457. doi:10.1037/h0027806

Weeks, J. W., Heimberg, R. G., Fresco, D. M., Hart, T. A., Turk, C. L., Schneier, F. R., & Liebowitz, M. R. (2005). Empirical validation and psychometric evaluation of the Brief Fear of Negative Evaluation Scale in patients with social anxiety disorder. *Psychological Assessment*, *17*(2), 179-190. doi:10.1037/1040-3590.17.2.179

Weeks, J. W., Heimberg, R. G., & Rodebaugh, T. L. (2008a). The Fear of Positive Evaluation Scale: Assessing a proposed cognitive component of social anxiety. *Journal of Anxiety Disorders*, *22*(1), 44-55. doi:10.1016/j.janxdis.2007.08.002

Weeks, J. W., Heimberg, R. G., Rodebaugh, T. L., Goldin, P. R., & Gross, J. J. (2012). Psychometric evaluation of the Fear of Positive Evaluation Scale in patients with social anxiety disorder. *Psychological Assessment*, *24*(2), 301-312. doi:10.1037/a0025723

Weeks, J. W., Heimberg, R. G., Rodebaugh, T. L., & Norton, P. J. (2008b). Exploring the relationship between fear of positive evaluation and social anxiety. *Journal of Anxiety Disorders*, *22*(3), 386-400. doi:10.1016/j.janxdis.2007.04.009

Weeks, J.W., & Howell, A.N. (2012a). Fear of positive evaluation. J.W. Weeks (Ed.), *The Wiley Blackwell Handbook of Social Anxiety Disorder* (pp. 433-453). Hoboken, NJ: John Wiley and Sons, Inc.

Weeks, J. W., & Howell, A. N. (2012b). The Bivalent Fear of Evaluation Model of Social Anxiety: Further integrating findings on fears of positive and negative evaluation. *Cognitive Behaviour Therapy*, *41*(2), 83-95. doi:10.1080/16506073.2012.661452

Weeks, J.W., Jakatdar, T.A., & Heimberg, R.G. (2010). Comparing and contrasting fears of positive and negative evaluation as facets of social anxiety. *Journal of Social and Clinical Psychology*, *29*(1), 68-94.

Wenzel, A. (2004). Schema content for threat in social phobia. *Cognitive Therapy and Research*, *28*(6), 789-803. doi:10.1007/s10608-004-0666-3

Wine, J. (1971). Test anxiety and direction of attention. *Psychological Bulletin*, *76*(2), 92-104. doi:10.1037/h0031332

Wittchen, H. U., & Beloch, E. E. (1996). The impact of social phobia on quality of life. *International Clinical Psychopharmacology*, *11*(Suppl 3), 15-23. doi:10.1097/00004850-199606003-00004

Wong, Q. J., & Moulds, M. L. (2012). Does rumination predict the strength of maladaptive self-beliefs characteristic of social anxiety over time? *Cognitive Therapy and Research*, *36*(1), 94-102. doi:10.1007/s10608-010-9316-0

Zatz, S., & Chassin, L. (1983). Cognitions of test-anxious children. *Journal of Consulting and Clinical Psychology*, *51*(4), 526-534. doi:10.1037/0022-006X.51.4.526

Zatz, S., & Chassin, L. (1985). Cognitions of test-anxious children under naturalistic test-taking conditions. *Journal of Consulting and Clinical Psychology*, *53*(3), 393-401. doi:10.1037/0022-006X.53.3.393

Zhou, X., Xu, Q., Inglés, C. J., Hidalgo, M. D., & La Greca, A. M. (2008). Reliability and validity of the Chinese version of the Social Anxiety Scale for Adolescents. *Child Psychiatry and Human Development*, *39*(2), 185-200. doi:10.1007/s10578-007-0079-0

Zubeidat, I., Salinas, J., Sierra, J., & Fernández-Parra, A. (2007). Psychometric properties of the Social Interaction Anxiety Scale and separation criterion between Spanish youths with and without subtypes of social anxiety. *Journal of Anxiety Disorders*, *21*(5), 603-624. doi:10.1016/j.janxdis.2006.09.010

Zupančič, M., Inglés, C. S., Bajec, B., & Levpušček, M. (2011). Reliability and validity evidence of scores on the Slovene version of the Questionnaire About Interpersonal Difficulties for Adolescents. *Child Psychiatry and Human Development*, *42*(3), 349-366. doi:10.1007/s10578-011-0218-5

Table 1

Ages (in years) of Participants

Age	*n*
18	56
19	41
20	14
21	5
22	6

Table 2

Zero-Order Correlations between Main Study Variables

Measure	1	2	3	4	5
1. Fear of Negative Evaluation	-				
2. Fear of Positive Evaluation	.37**	-			
3. Social Interaction Anxiety	.61**	.51**	-		
4. Public Speaking Anxiety	.46**	.22	.33**	-	
5. Test Anxiety	.24*	.28*	.28*	.34**	-

Note. Fear of Negative Evaluation = Brief Fear of Negative Evaluation-II; Fear of Positive Evaluation = Fear of Positive Evaluation Scale; Social Interaction Anxiety = Social Interaction Anxiety Scale; Public Speaking Anxiety = Personal Report of Public Speaking Anxiety; Test Anxiety = Cognitive Test Anxiety Scale.
*$p < .008$; **$p < .001$

Table 3

Descriptive Statistics of Main Study Variables

	M	*SD*	*Range*	*α*	*Skew*	*Kurtosis*
Fear of Negative Evaluation	34.18	12.74	12-60	.97	.06	-.84
Fear of Positive Evaluation	32.33	12.70	8-72	.82	.07	-.15
Social Anxiety	26.82	13.07	0-62	.83	.44	-.23
Public Speaking Anxiety	114.79	22.30	65-170	.76	.31	-.24
Test Anxiety	69.68	14.85	40-102	.84	.04	-.63

Note. Fear of Negative Evaluation = Brief Fear of Negative Evaluation-II; Fear of Positive Evaluation = Fear of Positive Evaluation Scale; Social Anxiety = Social Interaction Anxiety Scale; Public Speaking Anxiety = Personal Report of Public Speaking Anxiety; Test Anxiety = Cognitive Test Anxiety Scale.

Table 4

Regression Analyses Summary for Predictors of Fear of Negative Evaluation

Variable	*B*	*SE B*	*β*	*t*	*p*
Social Anxiety	.500	.073	.513	6.877	.000
Public Speaking Anxiety	.165	.044	.288	3.780	.000
Test Anxiety	-.003	.064	-.003	-.047	.963

Note. Social Anxiety = Social Interaction Anxiety Scale; Public Speaking Anxiety = Personal Report of Public Speaking Anxiety; Test Anxiety = Cognitive Test Anxiety Scale.
Note. R^2 = .44

Table 5

Regression Analyses Summary for Predictors of Fear of Positive Evaluation

Variable	*B*	*SE B*	*β*	*t*	*p*
Social Anxiety	.460	.082	.476	5.645	.000
Public Speaking Anxiety	.005	.049	.009	.106	.916
Test Anxiety	.119	.072	.140	1.653	.101

Note. Social Anxiety = Social Interaction Anxiety Scale; Public Speaking Anxiety = Personal Report of Public Speaking Anxiety; Test Anxiety = Cognitive Test Anxiety Scale.
Note. $R^2 = .29$

Table 6

Hierarchical Regression Analysis Summary for Predictors of Social Anxiety

Step and Predictor Variable	*B*	*SE B*	β	R^2	ΔR^2
Step 1:				.14	.14
Test Anxiety	.17	.08	.19		
Public Speaking Anxiety	.16	.05	.27		
Step 2:				.39	.25
Fear of Negative Evaluation	.58	.08	.56*		
Step 3:				.48	.09
Fear of Positive Evaluation	.33	.08	.32*		

*$p < .001$

Appendix A

Social Interaction Anxiety Scale

Instructions: For each item, please circle the number to indicate the degree to which you feel the statement is characteristic or true for you. The rating scale is as follows:

0 = **Not at all** characteristic or true of me.

1 = **Slightly** characteristic or true of me.

2 = **Moderately** characteristic or true of me.

3 = **Very** characteristic or true of me.

4 = **Extremely** characteristic or true of me.

1. I get nervous if I have to speak with someone in authority (teacher, boss, etc.).
2. I have difficulty making eye contact with others.
3. I become tense if I have to talk about myself or my feelings.
4. I find it difficult to mix comfortably with the people I work with.
5. I find it easy to make friends my own age.
6. I tense up if I meet an acquaintance in the street.
7. When mixing socially, I am uncomfortable.
8. I feel tense if I am alone with just one other person.
9. I am at ease meeting people at parties, etc.
10. I have difficulty talking with other people.
11. I find it easy to think of things to talk about.
12. I worry about expressing myself in case I appear awkward.
13. I find it difficult to disagree with another's point of view.

14. I have difficulty talking to attractive persons of the opposite sex.

15. I find myself worrying that I won't know what to say in social situations.

16. I am nervous mixing with people I don't know well.

17. I feel I'll say something embarrassing when talking.

18. When mixing in a group, I find myself worrying I will be ignored.

19. I am tense mixing in a group.

20. I am unsure whether to greet someone I know only slightly.

Appendix B

Personal Report of Public Speaking Anxiety

Directions: Below are eighteen statements that people sometimes make about themselves. Please indicate whether or not you believe each statement applies to you by marking whether you:

Strongly Disagree Disagree Neutral Agree Strongly Agree

1 2 3 4 5

1. While preparing for giving a speech, I feel tense and nervous.
2. I feel tense when I see the words "speech" and "public speech" on a course outline when studying.
3. My thoughts become confused and jumbled when I am giving a speech.
4. Right after giving a speech I feel that I have had a pleasant experience.
5. I get anxious when I think about a speech coming up.
6. I have no fear of giving a speech.
7. Although I am nervous just before starting a speech, I soon settle down after starting and feel calm and comfortable.
8. I look forward to giving a speech.
9. When the instructor announces a speaking assignment in class, I can feel myself getting tense.
10. My hands tremble when I am giving a speech.
11. I feel relaxed while giving a speech.
12. I enjoy preparing for a speech.
13. I am in constant fear of forgetting what I prepared to say.
14. I get anxious if someone asks me something about my topic that I don't know.

15. I face the prospect of giving a speech with confidence.

16. I feel that I am in complete possession of myself while giving a speech.

17. My mind is clear when giving a speech.

18. I do not dread giving a speech.

19. I perspire just before starting a speech.

20. My heart beats very fast just as I start a speech.

21. I experience considerable anxiety while sitting in the room just before my speech starts.

22. Certain parts of my body feel very tense and rigid while giving a speech.

23. Realizing that only a little time remains in a speech makes me very tense and anxious.

24. While giving a speech, I know I can control my feelings of tension and stress.

25. I breathe faster just before starting a speech.

26. I feel comfortable and relaxed in the hour or so just before giving a speech.

27. I do poorer on speeches because I am anxious.

28. I feel anxious when the teacher announces the date of a speaking assignment.

29. When I make a mistake while giving a speech, I find it hard to concentrate on the parts that follow.

30. During an important speech I experience a feeling of helplessness building up inside me.

31. I have trouble falling asleep the night before a speech.

32. My heart beats very fast while I present a speech.

33. I feel anxious while waiting to give my speech.

34. While giving a speech, I get so nervous I forget facts I really know.

Appendix C

Cognitive Test Anxiety Scale

(A = *Not at all typical of me,* B = *Only somewhat typical of me,* C = *Quite typical of me,* and D = *(Very typical of me.*)

1. I lose sleep over worrying about examinations.
2. While taking an important examination, I find myself wondering whether the other students are doing better than I am.
3. I have less difficulty than the average college student in getting test instructions straight.
4. I tend to freeze up on things like intelligence tests and final exams.
5. I am less nervous about tests than the average college student.
6. During tests, I find myself thinking of the consequences of failing.
7. At the beginning of a test, I am so nervous that I often can't think straight. .
8. The prospect of taking a test in one of my courses would not cause me to worry.
9. I am more calm in test situations than the average college student.
10. I have less difficulty than the average college student in learning assigned chapters in textbooks.
11. My mind goes blank when I am pressured for an answer on a test.
12. During tests, the thought frequently occurs to me that I may not be too bright.
13. I do well in speed tests in which there are time limits.
14. During a course examination, I get so nervous that I forget facts I really know.
15. After taking a test, I feel I could have done better than I actually did.
16. I worry more about doing well on tests than I should.
17. Before taking a test, I feel confident and relaxed.
18. While taking a test, I feel confident and relaxed.

19. During tests, I have the feeling that I am not doing well.
20. When I take a test that is difficult, I feel defeated before I even start.
21. Finding unexpected questions on a test causes me to feel challenged rather than panicky.
22. I am a poor test taker in the sense that my performance on a test does not show how much I really know about a topic.
23. I am not good at taking tests.
24. When I first get my copy of a test, it takes me a while to calm down to the point where I can begin to think straight.
25. I feel under a lot of pressure to get good grades on tests.
26. I do not perform well on tests.
27. When I take a test, my nervousness causes me to make careless errors.

Appendix D

Brief Fear of Negative Evaluation Scale

Read each of the following statements carefully and indicate how characteristic it is of you according to the following scale:

1 = Not at all characteristic of me
2 = Slightly characteristic of me
3 = Moderately characteristic of me
4 = Very characteristic of me
5 = Extremely characteristic of me

1. I worry about what other people will think of me even when I know it doesn't make any difference.
2. I am unconcerned even if I know people are forming an unfavorable impression of me.
3. I am frequently afraid of other people noticing my shortcomings.
4. I rarely worry about what kind of impression I am making on someone.
5. I am afraid others will not approve of me.
6. I am afraid that people will find fault with me.
7. Other people's opinions of me do not bother me.
8. When I am talking to someone, I worry about what they may be thinking about me.
9. I am usually worried about what kind of impression I make.
10. If I know someone is judging me, it has little effect on me.
11. Sometimes I think I am too concerned with what other people think of me.
12. I often worry that I will say or do the wrong things.

Appendix E

Fear of Positive Evaluation Scale

Read each of the following statements carefully and answer the degree to which you feel the statement is characteristic of you, using the following scale. For each statement, respond as though it involves people that you do not know very well. Rate each situation from 0 to 9. Please fill in only one bubble for each statement.

1. I am uncomfortable exhibiting my talents to others, even if I think my talents will impress them.
2. It would make me anxious to receive a compliment from someone that I am attracted to.
3. I try to choose clothes that will give people little impression of what I am like.
4. I feel uneasy when I receive praise from authority figures.
5. If I have something to say that I think a group will find interesting, I typically say it.
6. I would rather receive a compliment from someone when that person and I were alone than when in the presence of others.
7. If I was doing something well in front of others, I would wonder whether I was doing "too well".
8. I generally feel uncomfortable when people give me compliments.
9. I don't like to be noticed when I am in public places, even if I feel as though I am being admired.
10. I often feel under-appreciated, and wish people would comment more on my positive qualities.

Appendix F

Fear of Positive Evaluation Scale Public Speaking Anxiety Adaptation

Read each of the following statements carefully and answer the degree to which you feel the statement is characteristic of you in public speaking situations, using the following scale. For each statement, respond as though it involves people that you do not know very well. Rate each situation from 0 to 9. Please fill in only one bubble for each statement.

1. I am uncomfortable exhibiting my public speaking talents to others, even if I think my talents will impress them.

2. It would make me anxious to receive a compliment on a speech from someone that I am attracted to.

3. I try to choose clothes for a speech that will give people little impression of what I am like.

4. I feel uneasy when I receive praise on a speech from authority figures.

5. If I have something to say in a speech that I think a group will find interesting, I typically say it.

6. I would rather receive a compliment about a speech from someone when that person and I were alone than when in the presence of others.

7. If I was doing my speech well in front of others, I would wonder whether I was doing "too well."

8. I generally feel uncomfortable when people give me compliments about a speech I've given.

9. I don't like to be noticed when giving a speech, even if I feel as though I am being admired.

10. After giving a speech, I often feel under-appreciated, and wish people would comment more on my positive qualities.

Appendix G

Fear of Positive Evaluation Scale Test Anxiety Adaptation

Read each of the following statements carefully and answer the degree to which you feel the statement is characteristic of you when taking a test, using the following scale. For each statement, respond as though it involves people that you do not know very well. Rate each situation from 0 to 9. Please fill in only one bubble for each statement.

1. I am uncomfortable sharing my test score with others, even if I think my score will impress them.

2. It would make me anxious to receive a compliment on my test score from someone that I am attracted to.

3. When taking a test, I try to choose clothes that will give people little impression of what I am like.

4. I feel uneasy when I receive praise on my test score from authority figures.

5. If I have something to say about a test that I think a group will find interesting, I typically say it.

6. I would rather receive a compliment about my test score from someone when that person and I were alone than when in the presence of others.

7. If I was doing well on a test, I would wonder whether I was doing "too well."

8. I generally feel uncomfortable when people give me compliments on my test score.

9. I don't like to be noticed when I am taking a test, even if I feel as though I am being admired.

10. When I score well on a test, I often feel under-appreciated, and wish people would comment more on my positive qualities.